

[Report 1935] / Medical Officer of Health, Essex County Council.

Contributors

Essex (England). County Council.

Publication/Creation

1935

Persistent URL

<https://wellcomecollection.org/works/mtcte228>

License and attribution

You have permission to make copies of this work under a Creative Commons, Attribution license.

This licence permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See the Legal Code for further information.

Image source should be attributed as specified in the full catalogue record. If no source is given the image should be attributed to Wellcome Collection.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>



ADMINISTRATIVE COUNTY OF ESSEX.

REPORT

OF THE

MEDICAL OFFICER OF HEALTH

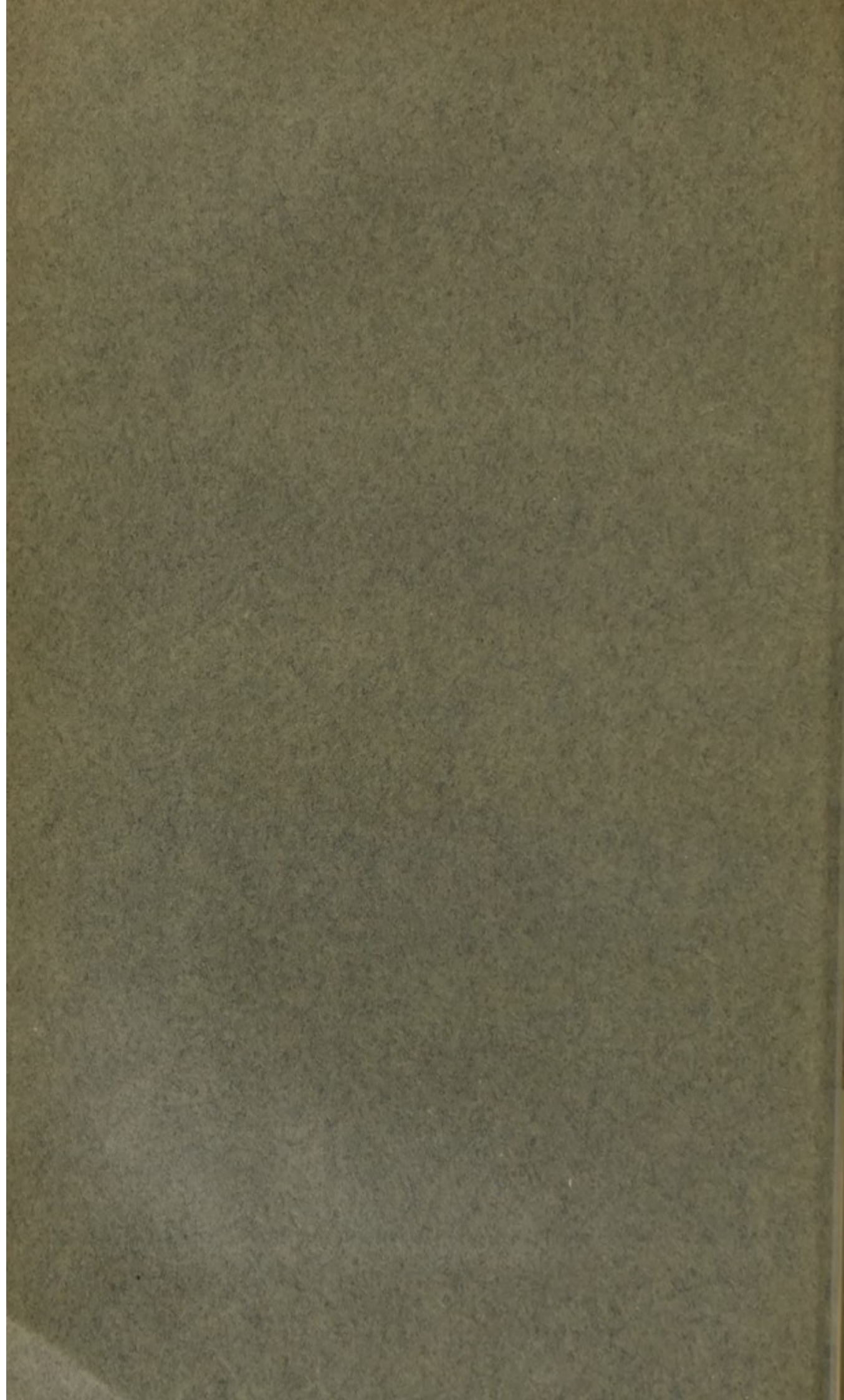
FOR THE YEAR 1935.

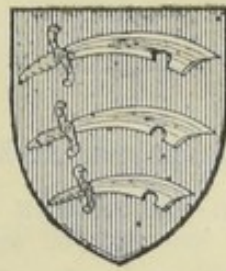
WILLIAM A. BULLOUGH, M.Sc., M.B., D.P.H.

COUNTY MEDICAL OFFICER OF HEALTH.

Chelmsford :

PRINTED BY JOHN DUTTON, 8, TINDAL STREET.





ADMINISTRATIVE COUNTY OF ESSEX.

REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR 1935.

WILLIAM A. BULLOUGH, M.Sc., M.B., D.P.H.

COUNTY MEDICAL OFFICER OF HEALTH.

Chelmsford :

PRINTED BY JOHN DUTTON, 8, TINDAL STREET,

PUBLIC HEALTH AND HOUSING COMMITTEE.

Chairman—ALDERMAN A. M. MATHEWS.

Vice-Chairman—ALDERMAN F. D. SMITH.

Aldermen—

A. Brooks, C. W. Daines, H. de Havilland, A. Porter.

Councillors—

J. R. Adams, Mrs. C. B. Alderton, Mrs. L. M. Anderton, P. Astins, W. Bulgin, A. L. Clarke, Mrs. C. Custerson, W. J. Day, A. G. Giller, A. W. Green, H. J. Hines, R. J. Hunt, J. C. Mead, J. C. Menhinick, H. F. Pash, C. S. Richardson, S. J. Romanes, Mrs. M. Sorensen, G. J. Wetton, Mrs. B. W. Williams, H. E. Wood and E. G. Wright.

MEDICAL AND NURSING SERVICES JOINT SUB-COMMITTEE.

Aldermen—

A. Brooks (Chairman), C. W. Daines, A. M. Mathews and F. D. Smith.

Councillors—

Miss M. L. Mathieson, J. C. Mead, A. G. Pearce, Mrs. B. W. Williams, and E. G. Wright.

Co-opted Members—

Mrs. K. M. E. Bell, A. S. Maskelyne.

HOSPITALS SURVEY COMMITTEE.

Aldermen—

A. Bradridge, A. Brooks, C. W. Daines, H. de Havilland (Chairman), A. M. Mathews, A. Porter, J. F. Sanders, F. D. Smith, Col. Gilbertson Smith.

Councillors—

P. Astins, W. Bulgin, Mrs. C. C. Chisholm, Mrs. C. Custerson, A. L. Clarke, A. W. Green, J. C. Mead, G. H. Spackman.

PREFACE.



To the Chairman and Members of the Essex County Council.

I have the honour to submit to you my Seventeenth Annual Report for the Administrative County of Essex for the year 1935. This is the 46th Annual Report which has been issued.

The year has been a good year so far as the health of the community is concerned. There was a record low death-rate and infant mortality rate, and not a single case of smallpox, and the incidence of infectious disease was greatly reduced.

There was a slight decrease in the birth-rate from 14.4 in 1934 to 14.3 in 1935, the total number of live births being 18,688 and 18,807 respectively. The lowest rate (8.7) recorded in the County was in the West Mersea Urban District, whilst the highest (19.0) was in the Tilbury Urban District. In one Municipal Borough, nine Urban Districts and three Rural Districts, the birth-rate was lower than the death-rate.

The death-rate for 1935 (9.5) is the lowest on record for the Administrative County, and is also much less than the rate for England and Wales, which was 11.7 in 1935. The number of deaths from heart disease (3,076) and Cancer (1,947) continues to increase, and is the highest ever recorded in this County.

A further decrease took place in the infant mortality rate, *i.e.*, deaths of infants under one year of age per 1,000 births, from 48 in 1934 to 44 in 1935. This is the lowest rate ever recorded in the Administrative County, and is much lower than the rate for England and Wales, which was 57 in 1935. The highest infant mortality rate (94) was in the Waltham Holy Cross Urban District, whilst there was not a single death of an infant under one year of age in the Urban Districts of West Mersea and Wivenhoe.

Another satisfactory feature of the year was the decrease in the number of infectious diseases notified, the figures being 8,913 for 1935 and 13,623 for 1934. This reduction was due to the decrease in the number of cases of diphtheria, pneumonia and scarlet fever. For the first time since 1927, the Administrative County was free from smallpox throughout the year. There would have been a much greater decrease in the number of cases of scarlet fever if the serious outbreak had not occurred in August in the Chelmsford Borough, where there were 436 notifications, and in the Chelmsford Rural District where there were 230 notifications. It is estimated that there were about 2,000 cases attributable to the source of infection, namely, a milker at a farm in the Chelmsford Rural District, who was at work with a sore throat due to *Streptococcus Pyogenes Hæmolyticus* No. 2, but owing to the absence of rash many cases were not notified. The disease was of the prevalent mild variety, but there were a few serious complications. Prompt investigation, helpful assistance from the bacteriological laboratories, and precautionary measures readily secured effective control of the outbreak. The experience once again emphasised the fact that

raw milk is still not a safe milk, and that if pasteurisation of all milk had been universal, this outbreak with its consequential fatal results, suffering, inconvenience and expense would in all probability have been averted. After reviewing the outbreak, the Public Health and Housing Committee instructed the Clerk of the County Council to address a circular letter to District Councils in the County referring to this outbreak, and suggesting that they should draw the attention of dairy farmers within their respective districts to the necessity for obtaining medical advice when illness occurs amongst the cowmen or their families.

Dr. John F. Beale, to whom I am indebted for his helpful co-operation, has again kindly given on pages 24 to 35 a detailed account of the work undertaken by him as Bacteriologist for Essex. A perusal of his report shows the wide range of specimens examined, and in addition, he has rendered assistance by personal advice to the general medical practitioners in the County, and has also paid visits to swimming pools, waterworks and sewage works. Experience proves that a laboratory of this nature is a vital part of the public health service.

The oyster purification plant at Brightlingsea, which is the only one of its kind in this country, has now been in continuous operation for two years. During that time the output has been at the rate of about 3,000,000 per annum. The Brightlingsea Urban District Council is to be congratulated on providing such an excellent system for the purification of oysters, which is a satisfactory safeguard of the public health, as it makes the oysters a clean and safe article of diet.

Overcrowding in dwellinghouses will become an offence in the Administrative County of Essex on 1st January, 1937, a legal standard having at last been laid down by the Housing Act, 1935. Unfortunately, the standard is not a high one. Surveys have been carried out by Rural District Councils in order to ascertain the extent of overcrowding, and according to returns already received, it varies from 0.8 per cent. to 3.8 per cent.

Increasing attention has been paid to the difficult problem of housing in rural areas, and inspections have shown that, unhappily, there are many houses in those areas unfit for human habitation according to modern standards. Fit houses which can be let at rents within the means of the rural workers are still urgently needed. Private enterprise is not likely to meet this need. The formidable task for securing repairs to houses, reconditioning houses, and providing new houses is, therefore, left to the Local Sanitary Authorities, most of whom are making every effort to raise the standard of housing in their respective areas.

Essex is regarded as a satisfactory County so far as the state of its rivers is concerned. Whilst it cannot be said that all the rivers have maintained their pristine purity, yet their appearance to-day can, generally speaking, be regarded as satisfactory. Probably this is largely due to the rural nature of the County in the northern, central and eastern portions, but some credit is also due to those Local Sanitary Authorities, who, regardless of the unremunerative aspect of sewage disposal, have provided and maintained sewage disposal works. Such Authorities are now improving matters still further by accepting as a general principle the policy of concentrating the treatment of sewage at fewer but larger works with better facilities and more efficient staff.

Full particulars of the year's activities in regard to the milk supply are given on pages 45 to 52. It has been a remarkably progressive year, during which much attention has been given to the nutritive value of milk, the obtaining of a cleaner and safer milk, and the securing of an increased consumption of liquid milk. The Chief Veterinary Officer (Mr. F. W. Medlock, M.R.C.V.S.) has issued his first Report for the period 1st October, 1934, to 31st December, 1935, in which he deals fully with the work carried out under the Milk and Dairies Order, 1926, and the Milk and Dairies (Consolidation) Act, 1915. I take this opportunity of thanking Mr. Medlock for his helpful co-operation in this work.

1,149 samples of milk were obtained for biological examination, 54 or 4.7 per cent. being found to contain tubercle bacilli. This is the lowest percentage ever recorded, and compares favourably with the percentage for 1934, which was 12.3.

There has been a great increase in the work under the Milk (Special Designations) Order, 1923, due to the Milk Marketing Board having inaugurated its Roll of Accredited Milk Producers on 1st May, 1935. At the end of the year, no less than 596 farms were licensed to produce Grade A milk, and such licence secures admission to the Board's Roll, upon which each farmer is entitled to a bonus of 1d. per gallon. In this rush of work, helpful assistance and co-operation were provided by the members of the staff of the East Anglian Institute of Agriculture and by the local Sanitary Inspectors, to whom I offer my best thanks.

Much credit is also due to the County Health Inspector and the Assistant County Health Inspectors for the splendid way in which they coped with the rapid increase of work which demanded many early morning and late evening visits to farms.

All these activities have in view the making of a cleaner and safer milk, which has been partially achieved in this County. The object now is to secure that every dairy farmer is licensed to produce Accredited milk, and that every milk supply in the County is made a safe milk. Routine inspection of dairy herds and milk sampling have already produced good results in respect to the procuring of a safer milk, but until the universal pasteurisation of milk by efficient and carefully controlled methods is established, experience proves that milk-borne disease is likely to arise at any time. I agree with the Bacteriologist for Essex (see page 27) that "the only one of the present grades of milk which can be recommended by the medical profession for human consumption is pasteurised".

It is significant that the British Medical Association at their annual representative meeting held in the Town Hall, Oxford, on 20th July, 1936, approved of the following recommendation:—

"That only milk complying with the condition required for the designations 'tuberculin tested' or 'pasteurised,' or preferably both, can safely be consumed without boiling."

The foundation of health is nutrition. This is not only dependent upon adequate wages, but also upon the efficiency of the housewife in respect of her knowledge of food values and cooking. More room must, therefore, be found in the curriculum of the elementary as well as secondary schools, so that girls can be taught to understand dietetics, food values and practical everyday buying and cooking. One of the most progressive steps in securing better nutrition was the inauguration of the Milk-in-Schools Scheme, under which each child can obtain one-third of a pint of milk daily

for one-halfpenny. It is important that similar schemes should be commenced without delay, in order to enable the families of the lower paid workers to purchase daily larger quantities of milk, which is such a valuable food for the promotion of growth and health. The diet of the working classes tends to be deficient in respect to dairy foods (butter, milk, cheese, eggs) and fresh green vegetables. The man who can enable the housewife to get milk at 2d. a pint will do more than anything else towards improving national physique.

Low rainfall of the previous three years was not maintained in 1935, when the rainfall was well above the average. Nevertheless, shortage of water continued in some rural areas, necessitating carting of water for domestic use. With two exceptions all the Rural Councils have now dealt comprehensively with their districts, aiming at furnishing at least the nucleus of a piped supply in every parish. Subject to at least equivalent grants from the County Council and Rural District Councils, the Minister of Health has already promised over £50,000 towards the cost of such schemes, the total cost of which is estimated at £693,237. I am much indebted to Mr. J. Mackworth Wood, M. Inst. C.E., who possesses an extensive knowledge of Essex Water Supplies, for his helpful assistance throughout the year.

The excellent work of the Town and Country Planning Committee is being continued, and it is gratifying to record that with the exception of the Borough of Leyton, the whole of the County is now covered by Executive Schemes which are in course of preparation or in operation. Further efforts have been made during the year to provide additional open spaces which are so essential in these days of building development, and the County Council has also made further efforts to secure much additional land with a view to preserving the amenities, and also to preserving several excellent views which are becoming more and more attractive to the general public.

It is again possible to record the continued decrease in both notification and mortality rates of all forms of tuberculosis, the figures being 1.03 and 0.54 respectively as compared with 1.23 and 0.59 for 1934. Of these two rates, the declining death rate is the more valuable indication that the fight against tuberculosis would appear to be approaching a victorious issue.

There was a further increase in the number of beds used at various institutions—670 in 1935 (625 in 1934) mostly accounted for by the fact that as artificial pneumothorax treatment is more extensively employed an additional number of beds is required to cope with the correspondingly increased length of stay.

Progress is being made in the extension of Black Notley Sanatorium and the erection of the Broomfield Court Sanatorium, when it is hoped that the County will have a sufficient number of beds under their own control to meet all the needs of patients requiring active treatment.

The work at the various Tuberculosis Dispensaries, particularly as consultation centres, has continued very efficiently and, as has been anticipated, the use of X-Rays in diagnosis has been more extensively employed—2,952 X-Ray photographs being taken during 1935 and 2,256 in 1934. Despite the decrease in both notification and mortality rates, the number of patients on the various Dispensary Registers increased from 4,999 in 1934 to 5,245 in 1935.

Part III of this Report shows that the Council's Maternity and Child Welfare Service has continued to develop and expand, more attention being given to the problem of supervising toddlers between the ages of one to five years. Special sessions for toddlers have been inaugurated at many of the larger Child Welfare Centres, and the provision of milk and medicament schemes were amended to enable children up to 3 years of age to receive these facilities.

Women's Welfare Clinics have been established at which, in addition to Birth Control advice being given, women are seen and advised upon post-natal and gynæcological conditions. On 1st April, 1935, Mr. W. S. O'Loughlin, M.C.O.G., was appointed part-time Gynæcologist and Obstetrician. Close co-operation has been maintained with the voluntary workers at Child Welfare Centres and also with the Essex County Nursing Association.

The dental scheme nearly doubled its service and there were 38 applications for Home Helps received as against only 11 for the previous year. A revised Home Helps Scheme has since been approved, and details are given on pages 101-2.

There is still a need for a Convalescent Home in Essex to which both Mothers and Infants can be admitted, and this will be borne in mind during the development of the hospital services.

On page 107 will be found reference to the Report of the Joint Council of Midwifery published in 1935, and also to the new Midwives Bill at present before Parliament which will somewhat revolutionise the country's midwifery services.

In Part IV, headed "Public Assistance," I have given a brief survey of the Council's five years' regime as guardian of the sick poor. The status and efficiency of the Poor Law Medical Services have been considerably improved during the five years.

October, 1935, saw the appropriation by the Public Health and Housing Committee of the Oldchurch Hospital, Romford, which is a first-class general Hospital, capable of dealing with all types of illness, and may be regarded as the first County "base" Hospital.

An experimental scheme of domiciliary treatment of the sick poor was approved during the year, whereby patients may select from a panel of doctors practising in their district the doctor whom they desire shall attend them. The scheme was put into operation from 1st January, 1936, in Chingford, Clacton and Walthamstow.

Training of nurses for the chronic and infirm sick was commenced at Epping and Orsett Institutions on 1st March, 1935, and the observations made on pages 121-2 might be useful to those interested in this vexed question of providing better trained persons for nursing these types of patients.

It will be seen from pages 68-71, headed "Provision of Hospital Services," that much has been accomplished in laying the foundation of our future hospital policy, and the next few years will undoubtedly show tremendous activity, both in municipal and voluntary hospital services in the County.

To assist in the celebration of the Silver Jubilee of the late King George V, the Public Health and Housing Committee authorised a total expenditure of not exceeding £200 for the Child Welfare Centres, Sanatoria, &c. At Child Welfare Centres, assistance was given to the extent of 50 per cent. of the cost of providing teas, prizes, &c., up to a maximum of £5 per centre. Grants were made to the County Sanatoria to meet expenditure for festivities, &c.

I have great pleasure in recording my appreciation of the confidence and support given to me by the Chairman and Members of the Public Health and Public Assistance Committees. To all the Medical Officers of Health and other officials of the Local Sanitary Authorities, to the Medical, Dental, Nursing, Inspectorial and Clerical Staffs, my best thanks are due for their efficient services. I am especially indebted to the Deputy County Medical Officer, Dr. T. P. Puddicombe, for his loyalty and support.

W. A. BULLOUGH,
County Medical Officer.

PUBLIC HEALTH DEPARTMENT,
COUNTY HALL,
CHELMSFORD.

27th July, 1936.

STAFF.*(31st December, 1935).***County Medical Officer, School Medical Officer and Chief Tuberculosis Officer.**

W. A. Bullough, M.Sc., M.B., Ch.B., D.P.H.

Deputy County Medical Officer.

T. P. Puddicombe, D.S.O., M.B., B.S., M.R.C.S., L.R.C.P., D.P.H.

Assistant County Medical Officers—Central Staff.

W. L. Yell, M.D., D.P.H., Senior Assistant County Medical Officer.

J. L. Miller Wood, M.R.C.S., L.R.C.P., D.P.H., M.M.S.A., First Assistant County Medical Officer.

A. Elliott, M.D., D.P.H., Assistant County Medical Officer.

Specialist Staff.*(a) Whole-time.*

G. J. Ahern, M.R.C.S., L.R.C.P., D.O.M.S., Ophthalmic Surgeon.

(b) Part-time.

Sir Henry J. Gauvain, M.C., M.A., M.D., F.R.C.S., Consulting Surgeon—Surgical Tuberculosis.

W. Burton Wood, M.A., M.D., M.R.C.P., D.P.H., Consulting Physician, Diseases of the Chest.

Mather Cordiner, M.B., Ch.B., D.M.R.E., Radiologist, Oldchurch Hospital.

G. Franklin Wood, M.A., M.B., B.Ch., D.M.R.E., Radiologist—Sanatoria.

Hamilton Bailey, F.R.C.S., Consulting Surgeon, Oldchurch Hospital.

R. W. Reid, M.S., F.R.C.S., Surgeon, Black Notley Sanatorium.

Arthur Burrows, M.D., M.R.C.P., D.M.R.E., Skin and Radium Specialist.

W. S. O'Loughlin, M.D., M.C.O.G., Gynaecologist and Obstetrician.

Hamblen Thomas, F.R.C.S., Ear, Nose and Throat Specialist.

T. Collyer Summers, F.R.C.S., Consulting Ophthalmologist, Oldchurch Hospital.

B. Whitchurch Howell, F.R.C.S., Orthopaedic Surgeon.

J. F. Beale, B.A., M.R.C.S., L.R.C.P., D.P.H., Bacteriologist for Essex.

Whole-time Medical Staff, Oldchurch Hospital, Romford.

E. Miles, M.B., Ch.B., D.P.H., Resident Medical Superintendent.

F. N. Foster, F.R.C.S., Non-resident Surgeon.

E. B. Whittingham, F.R.C.S., Assistant Resident Surgeon.

A. Garland, M.B., B.S., D.P.H., Non-resident Assistant M.O.

D. Stephens, M.R.C.S., L.R.C.P., Non-resident Assistant M.O.

J. L. Hopkins, L.M.S.S.A., Resident Assistant M.O.

S. F. Marshall, M.B., B.S., Non-resident Assistant M.O. and Pathologist.

Hilary Gunton, M.B., B.S., Junior Resident Medical Officer for 12 months.

Eileen Whapham, M.B., B.S., Junior Resident Medical Officer for 12 months.

Assistant County Medical Officers who are also Local Medical Officers of Health.

Name.	Qualifications.	Duties.
W. H. Alderton	.. M.C., M.R.C.S., L.R.C.P., D.P.H.	M.O.H., T.O., S.M.I., C.W.O.
B. F. Beatson	.. M.R.C.S., L.R.C.P., D.P.H., D.T.M. & H.	M.O.H., S.M.I., C.W.O.
W. T. G. Boul	.. M.D., D.P.H.	.. M.O.H., T.O., S.M.I., C.W.O.
K. N. Mawson	.. M.B., Ch.B., D.P.H.	.. Deputy M.O.H. and Asst. C.M.O.
Anna R. Park	.. M.B., B.S., D.P.H.	.. Asst. M.O.H. and Asst. C.M.O.
L. S. Fry ..	.. B.A., M.D., D.P.H.	.. M.O.H., T.O., S.M.I., C.W.O.
J. Hatton ..	.. M.D., D.P.H.	.. M.O.H., T.O.

Assistant County Medical Officers who are also Local Medical Officers of Health—
continued.

Name.	Qualifications.	Duties.
N. S. R. Lorraine	.. M.D., D.P.H., F.R.S. (Edin.)	.. M.O.H., T.O., S.M.I., C.W.O.
W. A. Milne	.. M.B., Ch.B., D.P.H.	.. M.O.H., T.O., S.M.I., C.W.O.
J. Ramsbottom	.. M.B., Ch.B., D.P.H.	.. M.O.H., T.O., S.M.I., C.W.O.
J. S. Ranson	.. M.R.C.S., L.R.C.P., D.P.H.	.. M.O.H., T.O., S.M.I., C.W.O.
S. R. Richardson	.. B.A., M.D., D.P.H...	.. M.O.H., T.O., S.M.I., C.W.O.

Medical Officers of Health undertaking some duties part-time for the County Council.

Name.	Qualifications.	District.
W. F. Corfield	.. M.D., D.P.H. ..	.. Colchester.
C. E. E. Herington	.. M.B., B.S., D.P.H. ..	.. Dagenham.
J. B. Samson	.. M.D., D.P.H. ..	.. Romford.
J. C. Sleight..	.. M.B., Ch.B., D.P.H. ..	.. Chelmsford.

Whole-time Assistant County Medical Officers.

Name.	Qualifications.	Duties.
L. G. Anderson	.. M.D., Ch.B., D.P.H.	.. S.M.I.
Kathleen M. Bodkin	.. M.R.C.S., L.R.C.P., D.P.H.	.. S.M.I. and C.W.O.
F. G. Brown	.. B.A., M.B., B.Ch., B.A.O., D.P.H.	T.O.
R. C. Cohen	.. M.D., D.P.H. ..	.. T.O.
J. G. Currid	.. M.A., M.B., Ch.B., D.P.H.	.. T.O.
R. H. G. Denham	.. M.D., D.P.H. ..	.. S.M.I. and C.W.O.
Rachel A. Elliott	.. M.D., D.P.H. ..	.. S.M.I. and C.W.O.
E. L. Ewan	.. M.B., Ch.B., D.P.H.	.. S.M.I.
V. Feldman	.. M.D., M.R.C.P., D.P.H.	.. S.M.I. and C.W.O.
A. R. Forbes	.. M.B., Ch.B., D.P.H.	.. S.M.I.
Annie B. Gardiner	.. M.B., Ch.B. ..	.. S.M.I. and C.W.O.
A. R. Graham	.. M.B., Ch.B., D.P.H.	.. S.M.I. and C.W.O.
J. Graham ..	.. M.A., M.B., Ch.B. ..	.. S.M.I.
Mary Meta Mackenzie	.. M.B., Ch.B., D.P.H., M.M.S.A...	S.M.I. and C.W.O.
T. L. Ormerod	.. M.A., M.B., B.Ch. ..	.. T.O.
H. Ramsay	.. M.B., B.S., M.R.C.S., L.R.C.P...	T.O.
Mary D. Rankine	.. M.B., B.S., D.P.H., M.M.S.A. ..	S.M.I. and C.W.O.
J. E. Stokes	.. M.A., M.D., D.P.H.	.. T.O.
M. C. Wilkinson	.. M.B., B.S., M.R.C.S., L.R.C.P...	Med. Supt., Black Notley San.

Medical Practitioners performing duties for County Council (part-time), S.M.I. or C.W.O.

L. M. Billingham, W. N. Booth, A. Borland, A. Butler-Harris, C. R. Dykes, W. F. Erskine,
Mary E. Fox, H. J. Garland, Sybil D. Goodwill, J. S. Hawes, Gweneth Hugh-Jones,
Alice Mackenzie, Lily Mackinnon, J. T. Moffat, F. A. M. Nelson, Evelyn Pirrie, Jemima
B. Ratcliffe, G. F. Rees Jones, P. T. Spencer Phillips, Margaret Turner, H. A. Watney,
C. A. Weller, J. T. Whitley, W. S. Willmore.

Matrons of County Sanatoria.

Miss M. Ruck, R.R.C.	..	..	..	.. Black Notley.
Miss S. B. Loosley	..	..	..	.. Harold Court.
Miss A. Roberts	..	..	..	.. High Beech.

Technical Staff.

County Health Inspector—

A. Marsh, M.R. San. I. and Cert. Insp. of Meat and other Foods.

Assistant County Health Inspectors—

R. H. Wigmore, M.S.I.A. and Cert. Insp. of Meat and other Foods.

F. H. Leggat, M.R. San. I. and Cert. Insp. of Meat and other Foods.

Orthopaedic Masseuses.**County Orthopaedic Masseuse—**

M. Scott, L.P.T.C., R.S.I., C.S.M.M.G.

District Orthopaedic Masseuses—

M. Haydon, C.S.M.M.G. and M.E.

M. E. Wells, C.S.M.M.G. and M.E.

Part-time Orthopaedic Masseuse. (By arrangement with B.R.C.S.).

D. Parsons, C.S.M.M.G.

Health Visitors, School and Tuberculosis Nurses.**Chief Health Nurse—**

D. M. Landon, Gen. Training, Cert. Mid. and R.S.I. (Also County Superintendent, Essex County Nursing Association).

Assistant Chief Health Nurse—

E. A. Davieson, H.V. Cert., Gen. Training and Cert. Mid. (Also Asst. County Superintendent Essex County Nursing Association).

Relief Health Visitor—

G. M. White, New H.V. Cert., Gen. Training and Cert. Mid.

(a) Whole-Time County Council.

Centre.	Name.	Qualifications.	Duties undertaken.		
			T.B.	S.N.	C.W.
Saffron Walden	.. Woodman, E. M...	Gen. Training and Cert. Mid-wife	Yes	Yes	Yes
Halstead	.. Starr, G. M.	.. New H.V. Cert., Gen. Training and Cert. Midwife	..	..	..
"	.. Jossaume, J.	.. New H.V. Cert., Gen. Training and Cert. Midwife	..	..	..
Lexden & Winstree	Meachen, H. V.	.. Gen. Training, Cert. Midwife and S.R.N.	..	..	..
"	.. Jackson, M. J.	.. Gen. Training and Cert. Mid-wife	..	..	..
Tendring	.. Steele, R. M.	.. Gen. Training and Cert. Mid-wife	..	..	..
"	.. Wallace, A. C. G.	Gen. Training and Cert. Mid-wife	..	..	..
"	.. Croll, M.	.. New H.V. Cert., Gen. Training, Cert. Midwife and R.S.I.	..	..	..
Saffron Walden	.. Chittenden, A. E.	Gen. Training and Cert. Mid-wife	..	..	..
Dunmow	.. Francis, N. M.	.. New H.V. Cert., Gen. Training, Cert. Midwife and S.R.N.	..	..	..
"	.. Ives, D. M.	.. New H.V. Cert., Gen. Training and Cert. Midwife	..	..	..
Braintree	.. Dickson, M. W.	.. New H.V. Cert., Gen. Training and Cert. Midwife	..	..	..
"	.. Humfress, J. K.	.. New H.V. Cert., Gen. Training and Cert. Midwife	..	..	..
"	.. Watson, H. J.	.. New H.V. Cert., Gen. Training Cert. Midwife and R.S.I.	..	..	..

Health Visitors, &c.—*continued.*(a) Whole-Time County Council—*continued.*

Centre.	Name.	Qualifications.	Duties undertaken.		
			T.B.	S.N.	C.W.
Epping	.. Myers, S. J.	.. New H.V. Cert., Gen. Training and Cert. Midwife	Yes.	Yes.	Yes.
"	.. Knowlton, D.	.. New H. V. Cert., Gen. Training and Cert. Midwife	"	"	"
Ongar ..	.. Mann, R. L.	.. New H.V. Cert., Cert. Midwife	"	"	"
Chelmsford	.. Bass, N. S.	.. R.S.I. and Cert. Midwife	.. "	"	"
"	.. Anderson, J. A.	.. H.V. Cert., San. Insp. Exam. Board and Cert. Midwife	"	"	"
"	.. Haryott, G. A.	.. New H.V. Cert., Gen. Training and Cert. Midwife	"	"	"
Maldon	.. Hillyer, I. G.	.. New H.V. Cert., Gen. Training and Cert. Midwife	"	"	"
"	.. Derry, A. M.	.. New H.V. Cert., Gen. Training and Cert. Midwife	"	"	"
"	.. Smith, V. E.	.. New H.V. Cert., Gen. Training and Cert. Midwife	"	"	"
Chingford	.. Waterhouse, M.	.. King's College Cert. and Bd. of Ed. Cert.	"	"	"
Waltham Abbey	.. Owen, C. A.	.. New H.V. Cert., Gen. Training and Cert. Midwife	"	"	"
Chingford	.. Turner, V. M.	.. New H.V. Cert., Gen. Training and Cert. Midwife	"	"	"
Woodford	.. Waterhouse, K.	.. Children's Cert. and Cert. Midwife	"	"	No
Buckhurst Hill	.. Glover, E.	.. Gen. Training, Cert. Midwife and R.S.I.	"	"	Yes
Romford	.. Newby, A. E.	.. Gen. Training ..	"	"	No
"	.. Champion, G. F.	.. New H.V. Cert., Gen. Training and Cert. Midwife	"	"	Yes
Hornchurch	.. Fawcett, E. H.	.. Gen. Training, R.S.I. and L.O.S.	"	"	"
"	.. Knox, E. A.	.. New H.V. Cert., Gen. Training and Cert. Midwife	"	"	"
"	.. Robinson, V. M.	.. New H.V. Cert., Gen. Training and Cert. Midwife	"	"	"
Brentwood	.. Hughes, M. A.	.. New H.V. Cert., Gen. Training and Cert. Midwife	"	"	"
"	.. Pethybridge, K. M. A.	.. New H.V. Cert., Gen. Training and Cert. Midwife	"	"	"
Billericay	.. Lamb, M. E.	.. New H.V. Cert., Gen. Training and Cert. Midwife	"	"	"
Orsett ..	.. Wall, A. D.	.. Gen. Training ..	"	"	No
Rochford	.. Smith, E. M.	.. Gen. Training and Cert. Midwife	"	"	Yes
Benfleet	.. Richardson, P. M.	.. New H.V. Cert., Gen. Training and Cert. Midwife	"	"	"
Rayleigh	.. Cassidy, M.	.. Gen. Training and Cert. Midwife	"	"	"
Billericay	.. Shepherd, M. A.	.. New H.V. Cert., Gen. Training and Cert. Midwife	"	"	"
Buckhurst Hill	.. Bartter, R. S.	.. Cert. Midwife and R.S.I.	.. No	No	"

Health Visitors, &c.—*continued.*

(b) Whole-time Tuberculosis Nurses.

Centre.	Name.	Qualifications.	Duties undertaken.		
			T.B.	S.N.	C.W.
Barking	.. Sansom, R.	.. Gen. Training ..	.. Yes	No.	No.
"	.. Alley, F. M.	.. Gen. Training, T.B. Training	"	"	"
Dagenham	.. Richards, E. F.	.. Board of Education (1923) Cert. Midwife	"	"	"
"	.. Stewart, D. B.	.. Gen. Training, Cert. Midwife and H.V. Cert.	"	"	"
Ilford ..	.. Martin, M.	.. New H.V. Cert., Gen. Training and Cert. Midwife	"	"	"
"	.. Bowman, T. E.	.. Cert. Midwife and Nursing Cert.	"	"	"
Leyton	.. Griffin, M. W.	.. Board of Education (1923) Cert., Cert. Midwife and R.S.I.	"	"	"
"	.. Lamborne, E.	.. Gen. Training, Cert. Midwife and R.S.I.	"	"	"
"	.. Cunningham, J.	.. Gen. Training and Cert. Mid- wife	"	"	"
Walthamstow	.. Purves, D.	.. Sanatorium training	.. "	"	"
"	.. Brightman, A.	.. Children's Cert.	.. "	"	"
"	.. Ames, A.	.. Gen. Training and Cert. Mid- wife	"	"	"

(c) Whole-time School Nurses.

Dagenham	.. Lunn, E. L.	.. Gen. Training ..	.. No	Yes	No
"	.. Thurtle, E.	.. Gen. Training and Cert. Mid- wife	"	"	"
"	.. Murphy, E. M.	.. Gen. Training and Cert. Mid- wife	"	"	"
"	.. Knight, M. K.	.. New H.V. Cert., Gen. Training and Cert. Midwife	"	"	"
"	.. Jefferson, G. L.	.. Gen. Training ..	.. "	"	"
"	.. Jewell, I. M.	.. Gen. Training and Children's Cert.	"	"	"
"	.. Alder, B.	.. Gen. Training and Cert. Mid- wife	"	"	"
"	.. Gardiner, N.	.. Gen. Training ..	.. "	"	"
Romford	.. Morgan, E. J.	.. Gen. Training and Cert. Mid- wife	"	"	"

(d) Whole-time, but only giving part-time to County Council.

Centre.	Name.	Qualifications.	Duties undertaken for C.C.		
			T.B.	S.N.	C.W.
Purfleet	.. Allcorn, R. E.	.. H.V's Diploma, 1920	.. No	No	Yes
"	.. Gibson, I.	.. H.V's Diploma ..	.. "	"	"
Grays	.. Polley, A.	.. Gen. Training and Cert. Mid- wife	Yes	Yes	No
"	.. Miller, E. C. P.	.. New H.V. Cert., Gen. Training and Cert. Midwife	"	"	"
"	.. Candler, E. M.	.. New H.V. Cert., Gen. Training and Cert. Midwife	"	"	"

Health Visitors, &c.—continued.

(d) Whole-time, but only giving part-time to County Council—continued.

Centre.	Name.	Qualifications.	Duties undertaken for C.C.		
			T.B.	S.N.	C.W.
Tilbury	.. Marshall, E.	.. Gen. Training and Cert. Mid-wife	..	..	..
..	.. Darrell, E.	.. H.V. Cert., Gen. Training and Cert. Midwife	..	..	..
..	.. Baker, E.	.. New H.V. Cert., Gen. Training and Cert. Midwife	..	..	..
Wanstead	.. Clarke, H.	.. New H.V. Cert., Gen. Training and Cert. Midwife	Yes	Yes	No
Colchester	.. Rickard, M. E.	.. New H.V. Cert., Gen. Training and Cert. Midwife	Yes	No	No

(e) Probationer Health Visitor.

Hornchurch	.. Land, L. B.	.. Gen. Training and Cert. Mid-wife	Yes	Yes	Yes
------------	----------------	-------------------------------------	-----	-----	-----

Dental Staff.

(a) Senior Dental Surgeon. (Whole-time).

Name.	Qualifications.	District.
Donaldson, S. K.	.. L.D.S., R.F.P.S.	.. Orsett, Rochford, &c.

(b) District Dental Surgeons. (Whole-time).

Roberts, A. S.	.. L.D.S., R.C.S.	.. Dagenham.
Hendry, A. W.	.. L.D.S., R.C.S.	.. Lexden & Winstree and Tendring.
Whitmore, A. L. T.	.. L.D.S. (Birm.)	.. Woodford and Chingford.
Davis, D. T.	.. L.D.S., R.C.S.	.. Hornchurch.
Hackman, W. G. C.	.. L.D.S., R.C.S.	.. Romford and Dagenham.
James, N. A.	.. L.D.S., R.C.S.	.. Braintree and Saffron Walden, &c.

(c) Dental Practitioners performing part-time duties for the County Council.

Weir, D. H., Weir, R. W., King, A. C., Howlett, E. R., Webb, S. J., Rose, W. S., Lewis, D. F.

(d) Whole-time Dental Attendants.

Pidgeon, W. J., Dallison, R., Brown, M. E., Wittich, D., Diggle, L., Martin, V. L. M.
Duncan, I.

Clerical Staff.

(a) Clerical Assistant .. J. Colman, A.C.I.S., Cert. R.S.I.

(b) Departmental Clerks .. L. Hey.
H. J. Allsup.

(c) Class I. Clerks .. P. T. Burdon.
P. H. Moth.

(d) Central Office.

Male Clerks.

J. W. Hurst.
 S. R. Shilton.
 A. C. Guymer.
 R. H. Dennison.
 R. Porter.
 E. Rich.
 M. W. Stock.
 R. W. Pye.
 A. H. Holmes.
 L. Saich.
 J. T. Hitching.
 R. Haywood.

Female Clerks.

N. M. Chaplin.
 E. Brazier.
 I. M. Thomas.
 Q. Nice.

Shorthand Typists.

B. E. Jaggs.
 E. H. Scott.
 F. W. Howard.
 P. C. Dewbury.
 M. Gowers.
 M. Joscelyne.
 L. Brown.
 E. M. Ward.
 N. Crozier.

(e) Dispensary Clerks.

Male.

A. E. Thornton.
 L. M. E. Lamb.

Shorthand Typists.

M. Bamerry.
 R. Carrington.
 E. H. Marks.

PART I.

ACREAGE AND POPULATION.

The area of the Administrative County remains as indicated in my Annual Report for the year 1934, namely, 961,665 acres. The following table sets out particulars of the Registrar-General's estimated population for the year 1935, compared with the census figures of 1931. The table also shows the number of persons per acre, number of inhabited houses, number of families or separate occupiers, &c., and the rateable value :—

	Area in Acres.		POPULATION.		No. of Persons per acre. (Calculated on 1931 Census).	No. of Acres per person. (Calculated on 1931 Census).	No. of inhabited houses (Census 1931).	No. of families or separate Occupiers (Census 1931).	Registrar-General's Estimate, Normal Population, 1935.		Rateable value 1st April 1935.
	Census 1921.	Census 1931.	Census						Districts.	Population.	
			1921.	1931.							
Municipal Boroughs (9)	45,754	45,702	468,214	543,389	11.9	0.08	119,532	140,520	Municipal Boroughs (9)	588,499	£8,803,521
Urban Districts (28)	97,748	97,948	219,533	375,242	3.8	0.26	87,575	92,773	Urban Districts (25)	512,801	
Rural Districts (17)	820,941	819,046	232,394	280,041	0.3	2.92	73,384	74,595	Rural Districts (12)	216,600	
	964,443	962,696	920,141	1,198,672	1.2	0.80	280,491	307,888		1,317,900	

The product of a 1d. rate is estimated at £35,008.

No re-arrangements of Sanitary Districts took place during the year, though further consideration was given to the revision of districts comprised in the old Orsett Union.

SOCIAL CONDITIONS.

With its estimated population of 1,317,900, Essex is now one of the largest administrative counties in England and Wales. As a result of its proximity to London the southern half of the county is largely residential and industrial, but the northern half is mainly agricultural. The chief industries are engineering (electrical, wireless and agricultural), cement and brickmaking, breweries, asbestos, boot and shoe-making and the manufacture of artificial silk and motor cars.

Essex has not been affected to any great extent by unemployment, in fact, during 1935 there has been a general improvement in those parts of the county where unemployment existed.

VITAL STATISTICS.

The total number of births, still-births, deaths, at all ages, &c., are set out in Table XXII, in Part V of the Report. The chief vital statistics of the Administrative County compared with those for England and Wales during 1935, are set out below :—

	Essex.		England and Wales.	
	1931-1935.	1935.	1931-1935.	1935.
Birth-rate per 1,000 population	14.9	14.3	15.0	14.7
Death-rate „ „ „	10.0	9.5	12.0	11.7
Zymotic death-rate per 1,000 population	0.2	0.2	Not available.	
Infant mortality rate per 1,000 births	49	44	62	57

There is a further satisfactory decline in the Infant Mortality Rate from 49 the mean of the last quinquennia to 44 per 1,000 for the year 1935, and this is the lowest rate ever recorded in the Administrative County. As a result of the efforts in safeguarding child life (which are set out in the section of the Report entitled "Maternity and Child Welfare") the death-rate of children in Essex should continue to decline.

NOTIFICATION OF INFECTIOUS DISEASES.

A summary of the notification of infectious diseases in the various Sanitary Districts during 1935 is set out in Table XXIV on page 126. The table shows that 8,913 persons were notified to be suffering from infectious disease, compared with 13,623 in 1934. This reduction is chiefly due to the decrease in the number of cases of diphtheria, pneumonia and scarlet fever; but with regard to the last named, it is possible that the ostensible reduction in the number of notified cases does not convey a true picture of the extent of hæmolytic streptococcal infections of the naso-pharynx.

SCARLET FEVER. The number of cases notified was 4,483, as against 5,660 in 1934, the number of deaths being 12 and 32 respectively for these two years.

Included in the notifications are 666 cases notified in the Borough and Rural District of Chelmsford, these being in large part as a result of an epidemic in these areas in August and September. This epidemic showed a high proportion of atypical cases showing no rash, but where the diagnosis rested on the clinical findings and the bacteriological recovery and typing of hæmolytic streptococci.

From the "explosive" nature of the outbreak of this epidemic it was clear that the most likely source was from infected milk, and investigation showed this to be the case—the milk emanating from a farm in the Chelmsford Rural District.

At this farm it was found that the usual four milkers were away ill, suffering from sore throats, and some of them, without the knowledge of their employer, had actually been at work while suffering from this condition. It was ascertained that the child of one of these milkers, and also the child of the employer, were at this time suffering from scarlet fever. Although the temporary milkers were apparently free from illness, the supply of milk from the farm was stopped until arrangements had been completed for its efficient pasteurisation.

Bacteriological investigation and the serological typing of the hæmolytic streptococcus responsible (type 2) made it possible to trace with exactitude the infection from the affected milkers to the milk and thence to one of the dairies supplying the

Borough of Chelmsford, and the outside distributors to whom "accommodation" milk was supplied in the Rural District.

Dr. J. L. M. Wood, who was Acting Medical Officer of Health for the Borough of Chelmsford during Dr. Sleigh's absence on holiday, was temporarily seconded from his County duties in order to devote his full time to deal with the epidemic. Dr. Vernon Shaw, of the Ministry of Health, visited Chelmsford several times during the epidemic period, when his advice and experience were of invaluable assistance.

The services of Dr. F. E. Camps, of the Chelmsford and Essex Hospital, were freely used in connection with the extensive bacteriological work necessitated by the outbreak. A large number of hæmolysis and typing examinations were made, and proved of primary importance in tracing the source of the epidemic, and in establishing the diagnosis in many atypical cases. Dr. Miller Wood in collaboration with Dr. Camps has written an article on this outbreak which has been accepted by "The Lancet" and will be published shortly.

Once again the fact was demonstrated that persons working in connection with the supply of milk must be educated as regards the necessity of obtaining medical advice when they, or their families, show any sign of illness.

DIPHTHERIA. The notifications have decreased from 2,717 in 1934, to 1,919 during the past year. The deaths were also reduced from 165 to 102. It is pleasing to record that an increasing number of local Sanitary Authorities have arranged for the carrying out of Diphtheria Immunization.

ENTERIC FEVER. 82 patients were notified as suffering from Enteric Fever, compared with 50 in 1934. The disease was mainly prevalent in the Urban Districts (68 cases) and was of a mild character, only 3 deaths being recorded.

SMALLPOX. During 1935 not a single case of Smallpox was reported from the Administrative County area, this being the first clear year since 1927. Further reference is made to the provision for patients suffering from Smallpox under the heading of "Isolation Hospitals" on page 36.

VACCINATION.

During the year ended 31st December, 1934 (the latest period for which complete information is available), the Vaccination Officers' returns summarised in Table II show that 16,785 births were registered. Of these, 5,452 were successfully vaccinated, and in 8,732 instances a declaration of conscientious objection was made. Of the remaining 2,601 births, 598 removed to places unknown; 470 removed to districts of other Vaccination Officers who were duly notified; in 166 cases vaccination was postponed by medical certificate; 44 proved insusceptible of vaccination, and 577 died un-vaccinated. At the end of the year 746 births remained which had not been entered in the vaccination register or temporarily accounted for in the report book.

With regard to the number of persons successfully vaccinated and re-vaccinated at the cost of the rates by Public Vaccinators and Medical Officers of Poor Law Institutions, the Clerk of the County Council has kindly forwarded to me the following information in respect to the year ended 30th September, 1935 :—

TABLE I.

Guardians Committee Areas.	No. of Births in "Birth" List Sheets " registered 1st Jan. to 31st Dec., 1934.	No. of these Births entered by 31.1.36 in Cols. I, II, IV and V of the "Vaccination Register" (Birth List Sheets), viz. :—					No. of Births which on 31.1.36 remained unentered in the "Vac- cination Register" on account of :—			No. of these Births remaining 31.1.36 neither entered in the "Vaccination Register" nor temporarily accounted for in "Report Book."	No. of Certificates of successful Primary Vaccination of Children under 14 received during 1935.	No. of Statutory Declarations of Conscien- tious objection received by V. O. during 1935.
		Col. I. Success- fully vacci- nated.	Col. II.		Col. IV. No. of Statu- tory Decla- rations.	Col. V. Died un- vacci- nated.	Postpone- ment by medical certifi- cate.	Removal to Districts the Vaccination Officer of which have been appraised.	Removal to places to unknown and cases not found.			
			Insus- ceptible of vacci- nation.	Had Small- pox.								
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Braintree ..	730	299	1	—	385	24	3	10	6	2	285	380
Chelmsford ..	1,836	659	4	—	926	55	14	34	71	73	701	933
Colchester ..	1,862	654	5	—	1,031	57	7	37	52	19	823	1,048
Epping ..	513	248	3	—	219	18	3	5	14	3	277	202
Saffron Walden ..	436	239	—	—	167	19	—	—	9	2	290	131
Southern ..	6,197	1,922	19	—	3,112	226	71	183	225	439	2,394	3,321
South Eastern ..	1,866	414	4	—	967	62	34	161	88	136	517	917
South Western ..	3,345	1,017	8	—	1,925	116	34	40	133	72	1,561	2,087
	16,785	5,452	44	—	8,732	577	166	470	598	746	6,848	9,019

The Totals of the figures in columns 3 to 11 agree with the figure in Column 2.

Number of successful Primary Vaccinations of persons :—

(a) Under 1 year of age	4,474
(b) 1 year and upwards	609
(c) Total	5,083

Number of successful re-vaccinations, *i.e.*, successful vaccinations of persons who had been successfully vaccinated at some previous time 233

VENEREAL DISEASE.

The Administrative County of Essex participates in the London and Home Counties Venereal Diseases Scheme whereby patients from Essex may attend for advice and treatment at most of the large London Hospitals. The facilities for such treatment have been greatly developed during the last few years by improvements in the premises, medical staffing and the commencement of all-day sessions so that patients may now attend at times most convenient to themselves.

In addition to the London Clinics provision has been made for the treatment of patients suffering from venereal diseases at the following places which serve those parts of the County not adjacent to London :—

Chelmsford & Essex Hospital.
Colchester General Hospital.
Ipswich General Hospital.
Borough Sanatorium, Southend.
Ad hoc Clinic, Gravesend.

In addition, a number of patients from Essex found it convenient to attend at the Prince of Wales Hospital, Tottenham.

The County Council assists necessitous patients by paying their travelling expenses to and from approved venereal diseases clinics, and during the financial year ended 31st March, 1936, 109 patients were so assisted at a cost of £262 9s. 6d.

There are 49 medical practitioners whose experience in treating venereal diseases qualifies them to receive free supplies of Arseno-benzene Compounds for the treatment of early and infectious cases of Syphilis. The amount of drugs issued in this way, however, is not great, and would possibly appear to indicate that the majority of cases of Syphilis diagnosed are treated at the Venereal Diseases Clinics.

Table II on page 21 shows the attendances of Essex patients at the various clinics from which it will be noted that the total attendance again increased from 72,442 in 1934 to 76,307 in 1935. There was also a slight increase in the number of in-patient days, but decreases were recorded in the number of patients treated for the first time and the number of doses of Arseno-benzene Compounds administered.

During the year consideration was given to the question of the adequacy of facilities for treatment in certain areas of the County and an Inquiry was conducted

TABLE II.
TREATMENT OF VENEREAL DISEASE, YEAR 1935.

Treatment Centre.	Patients from all Areas. Total No. treated for first time.	ESSEX PATIENTS						In-patient Days.	Number of doses of Arseno-Benzene Compounds given in Out-patient Clinic and In-patient Department.	Hostels. In-patient days.
		Total Number treated for first time suffering from				Total No. of Attendances of Essex Patients.				
		Syphilis.	Soft Chancre.	Gonorrhoea.	Not V.D.		Total.			
London Hospitals	28403	121	16	458	616	1211	64635	2692	2904	1466
St. Bartholomew's, London	858	3	—	7	11	21	187	—	—	—
Chelmsford	27	10	—	11	6	27	567	—	87	—
Colchester	154	33	—	45	62	140	4605	18	1106	—
Ipswich	215	2	—	6	4	12	133	15	3	—
Southend	299	6	1	18	29	54	1046	—	68	—
Gravesend	283	—	5	33	24	62	2353	—	157	—
Tottenham	488	6	1	34	17	58	2781	25	72	—
Total for 1935...	30,727	181	23	612	769	1585	76307	2750	4397	1466
Total for 1934...	30,719	245	19	731	644	1639	72442	2663	4823	1419
" 1933...	31,116	303	20	774	613	1710	63368	3491	4942	1307
" 1932...	29,935	274	13	693	659	1639	53444	2288	4688	2173
" 1931...	27,970	281	30	580	564	1455	45007	2245	4949	2416
" 1930...	29,086	322	20	503	543	1388	33614	1311	3429	2601

Harwich as to whether seamen, both foreign and English, were adequately served by the clinics at Colchester and Ipswich. No evidence was adduced to lead to the conclusion that a Venereal Diseases Clinic was necessary at this Port.

In the southern and south-western areas of the County the rapidly expanding population undoubtedly necessitates the provision of Clinics more readily accessible to the main masses of population. It was recommended therefore, that a Venereal Diseases Clinic should be established at the Oldchurch Hospital, Romford. Subsequently the County Council approved of this proposal and it is hoped to have the Clinic working by the end of 1936. It is anticipated that when this Clinic is fully established it will provide a continuous service for patients during the day and will deal with some 400—500 new patients per annum. Active consideration is also being given to the establishment of Venereal Diseases units in connection with several of the proposed new County Hospitals.

Further negotiations took place with the Seamen's Hospital, Tilbury, but no definite decision was reached.

The most important Venereal Diseases Clinic in the County outside the Metropolitan area is that operated in conjunction with the Essex County Hospital, Colchester.

Dr. A. Elliott, Medical Officer, reports as follows :—

“ A notable step during the year has been the increase of weekly sessions from two to four so that patients can attend on every other weekday to consult the medical officer.

In previous years no attempt had been made to persuade patients who had defaulted in their attendance to re-attend. This has been amended and a routine letter is now sent to the patients who default in their attendances. This letter is so worded as not to compromise the patient to whom it is directed should it fall into wrong hands. Three letters are sent at monthly intervals. About 15 per cent. of the defaulters re-attend, about 20 per cent. of letters are returned as the patient has left the address given ; no response is received from the remainder. In a few cases visits have been made to the homes of defaulters, particularly where cases of Congenital Syphilis are concerned, and while it would be desirable to see an extension of this branch of the work it is not considered that its utility would be as high as generally supposed. It is one thing to persuade a patient to re-attend or to persuade the parents of a child suffering from Congenital Syphilis to bring their child up again, but it is quite a different matter to ensure that they will attend regularly thereafter. Actually it is found that many of these cases attend for a short time after receiving a letter pointing out the serious consequences that may ensue if they neglect treatment, and then default again. A further warning letter again results in a few attendances, but eventually the patient ceases to attend altogether.

It is apparent that patients' attendances will depend very largely on the type of service and treatment they are offered and the personality of the staff of the clinics. Nevertheless, there are many individuals who either

through inability to reason for themselves or their children or through sheer ignorance or "fecklessness," become a menace to society in their persistent refusal to accept treatment for themselves or their children. It is deplorable enough for a person to refuse treatment when suffering from venereal disease, but it is infinitely worse that the parents of a child suffering from Congenital Syphilis refuse to have it treated. It is, of course, possible to bring legal proceedings on the grounds of cruelty against such parents, but this procedure is devious and involves the breach of professional confidence.

While compulsory notification of all venereal diseases remains a controversial topic, it is clear that legislation is highly desirable defining the duties of parents to the children whom they have infected with Syphilis. Public opinion is ill-informed on this subject. While, no doubt, it is an excellent thesis in theory that public opinion should always be ahead of legislation, there are circumstances where the reverse is a more practical proceeding and one likely to result in the increase of the well-being of the community. While we are now waiting for improved education and health propaganda to work its slow leaven in the minds of the public so as to educate them to demand compulsory notification of venereal disease, parents, either through their ignorance or folly, are entitled to refuse treatment for their children when infected with Syphilis and expose them to the risks of blindness or worse, with the resulting additional burden upon the rest of Society."

METEOROLOGY.

Table III has again been compiled from information kindly supplied by the County Meteorological Station at Chelmsford. The year 1935 was not so kind as the two previous years, but though the summer was shortened it was comparatively hot, and it will be noted that on three days in July, maximum temperatures of 84° were recorded.

As mentioned under the heading "Water Supplies," the total rainfall recorded was 27.32 inches, compared with 18.67 for 1934.

TABLE III.

OBSERVATIONS FROM THE COUNTY METEOROLOGICAL STATION AT CHELMSFORD.

1935.	Dry bulb readings.	Wet bulb readings.	Maximum readings.	Minimum readings.	Absolute maximum.	Date of absolute maximum.	Absolute minimum.	Date of absolute minimum.	Number of rainy days.	Rainfall in inches.
January	37.8	38.0	43.5	36.3	53	1st & 2nd	25	9th & 29th	18	1.78
February	42.0	39.8	48.9	38.1	58	2nd	27	9th	16	2.13
March	41.8	40.7	51.4	36.3	66	21st	29	5th & 9th	9	0.76
April	48.1	45.1	54.3	41.7	63	23rd	31	5th	20	2.66
May	53.1	48.0	60.9	41.9	76	6th	27	17th	7	1.18
June	60.02	57.9	68.9	54.07	84	24th	46	1st & 5th	19	3.49
July	67.6	61.7	76.0	†	84	11th, 13th & 14th	†	†	5	1.10
August	66.4	59.9	75.0	†	85	21st	†	†	8	1.79
September	59.14	56.12	67.0	48.3	73	12th	34	26th	21	3.14
October	56.5	48.6	57.7	42.0	62	16th & 29th	26	21st	15	2.7
November	45.0	44.1	50.9	39.3	63	3rd	28	25th	24	4.29
December	37.3	36.6	42.6	33.0	52	28th	18	23rd	19	2.3
TOTAL—										
Year 1935	...	...	...	...	...	...	...	...	...	27.32
" 1934	...	...	...	...	...	...	...	...	...	18.67

† No readings available.

EXAMINATION OF BACTERIOLOGICAL SPECIMENS.

The County Council continued the arrangements with Dr. John F. Beale, of 91, Queen Victoria Street, London, E.C.4 (Telephone No. : Central 6836) whereby he acts as part-time Bacteriologist for Essex.

Table IV on page 25 sets out the number and type of specimens examined, from which it will be observed that during 1935, 21,166 public health specimens were dealt with, compared with 24,576 in 1934. In addition, Dr. Beale examined 125 specimens of sewage and trade effluents and river water.

Dr. Beale has kindly supplied the following report on the work undertaken during the year 1935 :—

The work of the laboratory has continued to increase although the total number of specimens received during 1935 is less than for the preceding year. This is due to a fall of over 5,000 in the number of throat swabs submitted for Diphtheria, and the fact that separate arrangements have been made for biological tests on samples of milk. There has, however, been a large increase in the number of all other specimens.

The total number of specimens received during the past two years is shown below :—

1934.	1935.
27,240	23,780

The specimens examined during 1935 can conveniently be divided into the following Groups :—

Group A.

Samples of Water, Sewage Effluents, &c.	Total number	380
---	--------------	-----

Group B.

Samples of Milk and other Foods	Total number	292
---------------------------------	--------------	-----

Group C.

Pathological Specimens received from Medical Practitioners, Medical Officers of Health, Infectious Diseases Hospitals and Sanatoria	Total number	21,166
--	--------------	--------

Group D.

Pathological Specimens received from County Public Assistance Institutions	Total number	1,942
---	--------------	-------

	Total	23,780
--	-------	--------

Group A. Samples of Water, etc.

The 380 samples of water, effluents, &c., consisted of the following :—

(1) Samples of Drinking Water	234
(2) Samples of River Waters	7
(3) Samples of Sewage Effluents and Trade Wastes	125
(4) Samples of Swimming Bath Waters	14

TABLE IV.

SHEWING NUMBER AND TYPE OF PUBLIC HEALTH SPECIMENS EXAMINED
BY THE BACTERIOLOGIST FOR ESSEX—YEAR 1935.

SANITARY DISTRICTS.	Diph- theria.	Sputa.	Typhoid	Ring- worm.	Miscel- laneous.	Total Specimens examined.	Virulence Tests for Diphtheria and Tubercle.
URBAN—							
Barking B. ...	+2792	†186	21	2	35	3036	20
Bentfleet ...	27	13	...	1	...	41	...
Billericay ...	+669	†376	15	1	9	1070	...
Braintree & Bocking ...	247	†62	3	1	13	326	5
Brentwood ...	181	†80	1	1	68	331	2
Brightlingsea ...	1	5	...	...	1	7	...
Burnham-on-Crouch ...	5	7	...	...	...	12	...
Canvey Island ...	34	13	2	...	1	55	...
Chelmsford B. ...	85	†89	16	...	51	241	2
Chigwell ...	19	29	2	...	17	67	...
Chingford ...	+252	†252	6	...	16	526	1
Clacton-on-Sea ...	64	†49	4	...	20	137	...
Colchester B. ...	2	†205	31	3	8	249	...
Dagenham ...	530	†442	...	14	35	1021	2
Epping ...	+218	†51	9	...	13	294	...
Frinton & Walton ...	7	6	...	1	13	27	...
Grays ...	885	†96	102	...	8	1091	3
Halstead ...	+58	†17	14	1	2	92	...
Harwich B. ...	59	†37	8	5	5	114	1
Hornchurch ...	291	†1303	1	1	22	1618	1
Ilford B. ...	+487	†857	44	1	109	1498	63
Leyton B. ...	+2503	†488	6	6	34	3032	7
Maldon B. ...	233	†11	6	1	6	257	...
Purfleet ...	86	8	2	...	5	101	...
Rayleigh ...	50	15	1	...	4	70	...
Romford ...	+352	†239	5	7	26	629	11
Saffron Walden B. ...	25	†11	...	1	11	48	...
Tilbury ...	117	52	4	5	1	179	...
Waltham Holy Cross ...	406	49	11	...	23	489	...
Walthamstow B. ...	127	†239	22	10	83	481	1
Wanstead & Woodford ...	377	†414	8	7	19	825	...
West Mersea ...	16	3	...	1	17	37	...
Witham ...	34	17	6	...	7	64	...
Wivenhoe ...	3	9	...	1	...	13	...
Total ...	11242	5733	350	71	682	18078	119
RURAL—							
Braintree ...	+291	†970	6	...	411	1678	30
Chelmsford ...	+54	53	2	3	34	146	...
Dunmow ...	160	†26	2	...	37	225	...
Epping... ..	79	37	6	1	7	130	...
Halstead ...	34	34	3	13	2	86	...
Lexden & Winstree ...	39	43	3	1	18	104	...
Maldon ...	+99	35	1	3	12	150	...
Ongar ...	35	14	1	...	53	103	...
Orsett ...	+91	31	15	1	6	144	...
Rochford ...	+164	18	...	...	...	182	...
Saffron Walden ...	39	11	1	1	3	55	...
Tendring ..	42	†33	1	6	3	85	...
Totals— Rural ...	1127	1305	41	29	586	3088	30
Urban ...	11242	5733	350	71	682	18078	119
Adminis. County ...	12369	7038	391	100	1268	21166	149

† Includes specimens taken at Isolation Hospital in district.
+ " " Sanatoria or Dispensary.

Drinking Water.

These include samples of the Public Water Supplies of the County, but the majority were collected from private supplies, mostly dairy farms.

All samples were submitted both to chemical analysis and bacteriological examination.

The standard of purity of the Public Water Supplies of the County is generally of a high order, but the problem of water supply in Rural Districts, to farms, etc., is a difficult one, particularly in drought years.

There is little doubt, however, that even viewed in very lenient light many water supplies to small isolated communities in Essex must be regarded as unsatisfactory and every effort should be made to render Public Mains available whenever reasonably possible.

River Waters.

These samples were examined chemically and bacteriologically, mostly for the purpose of ascertaining the degree of impurity caused by the discharge therein of sewage effluents or trade-wastes.

Sewage Effluents.

The effluents discharged from Sewage Works into water-courses are required to comply with certain prescribed standards variable according to the dilution afforded by the stream.

The 125 samples submitted to analysis can be divided according to their compliance or otherwise with the County Standards, as follows :—

Satisfactory	..	..	69	} = 65%
Border-line	..	..	12	
Unsatisfactory	..	..	44	= 35%

Group B. Samples of Milk.

The samples of milk and the examinations to which they were submitted were as follows :—

(1) Ordinary Raw Milk.

(1) 223 samples were examined microscopically for tubercle bacilli and 12 or 5.4 per cent. gave positive results.

Microscopical examination for tubercle bacilli is, however, regarded as unreliable and the method has largely been superseded by the more satisfactory procedure of periodical veterinary inspection of cows, and animal inoculation test of samples of milk.

(2) Animal Inoculation Tests for Tubercle Bacilli.

38 samples of milk were submitted for biological test and 4, *i.e.*, 10.5 per cent., gave positive results.

The small number this year of samples submitted to animal inoculation test compared with last year (789) is accounted for by the fact that arrangements have been made for these samples to be examined in other laboratories.

(3) 223 samples were submitted to the following examinations :—

- (a) Microscopical examination for pus and blood.
- (b) Observations with regard to suspended extraneous matter.
- (c) Cultural examination for B. Coli.

(4) 3 samples of milk from supplies suspected to be responsible for the spread of disease were submitted to special bacteriological examination.

(2) *Special Milks.*

29 samples of Graded or School Milks were received for bacteriological examination, which included :—

- (a) Total bacterial count.
- (b) Examination for B. Coli.

Under the " Milk in Schools " Scheme the samples are required to comply with the standards prescribed for Grade " A " milks, *i.e.* :—

- (a) Bacterial count not to exceed 200,000 per 1 c.c.
- (b) " B. Coli Test " to be negative in 0.01 c.c.

Since, however, they are mostly pasteurised milk, the bacterial count should not exceed 100,000 per 1 c.c.

It has long been known that the present laboratory examinations and standards for milk are unsatisfactory, and much attention has recently been given to this matter.

As a result, the Minister of Health is about to issue new Regulations with regard to milk supply, with recommendations concerning the examination of samples.

The universal pasteurisation of milk by efficient and carefully controlled plant is, in my opinion, the most satisfactory method of ensuring a safe milk supply, and until such is enforced, milk-borne disease, such as was reported at Chelmsford during 1935, will continue to occur in spite of every activity under existing conditions.

There is an abundance of authoritative opinion that controlled pasteurisation does not impair the nutritive properties of milk to any degree which would outweigh its epidemiological advantages.

In my opinion, the only one of the present grades of milk which can be recommended by the Medical Profession for human consumption is Pasteurised.

Other Foods.

One sample of Chutney suspected to be the cause of food-poisoning was received for bacteriological examination and proved to be sterile.

Group C. Pathological Specimens.

The total number of pathological specimens was 21,166, and many were submitted to a number of different examinations as detailed below.

The distribution of these specimens throughout the Administrative County, and their approximate classification, is shown in Table IV.

These specimens can for convenience be considered under the following headings :—

(1) *Swabs from Throat, Nose and Ear, Diphtheria, Scarlet Fever, etc.*

These specimens comprise a large proportion of the whole, for the total number was 12,748.

The examination most frequently required is (a) for Diphtheria Bacilli ; (b) for Streptococci.

The total number of swabs examined primarily for Diphtheria Bacilli was 12,369, of which 1,360 or 11 per cent. gave positive results.

Direct microscopical examination of swabs for Diphtheria Bacilli is not carried out as a routine measure, but only on request and the findings in all cases are confirmed by cultivation.

Animal inoculation tests (paragraph 13) are carried out when required to establish the virulence or otherwise of Diphtheria Bacilli isolated from swabs.

Many swabs are examined as indicated by the clinical notes on the patients, for other bacteria such as the organisms of Vincent's Angina, Tubercle Bacilli, Streptococci, &c.

There has been a large increase during the year in the number of throat and nose swabs submitted for examination for Streptococci associated with Scarlet Fever and allied conditions.

The total number was 379, of which 137 or 36 per cent. showed the presence of Hæmolytic Streptococci.

Apart from special examination for streptococci, the majority of these swabs were also submitted to general bacteriological examination.

The position with regard to Streptococci is at present one of chaos, and much research is taking place to establish some degree of order.

The term " Streptococci " simply refers to a group of micro-organisms containing many members of different characters, but having the common property of dividing (multiplying) in such a manner as to form chains of cocci.

This classification is unscientific and it would be just as unreasonable to group together all microbes which multiply by spore formation such as *B. Mycoides* and *B. Botulinus*.

Streptococci are further sub-divided into two groups—Hæmolytic and Non-Hæmolytic, depending on their ability during growth of hæmolysing red blood corpuscles.

Whether this property is constant to any strain and has any fundamental importance in classification still remains to be proved, but there is considerable evidence that the Streptococci associated with morbid conditions are most commonly of hæmolytic strains.

However, it does not follow that Non-Hæmolytic Streptococci are entirely devoid of pathogenicity and, on the other hand, Hæmolytic Streptococci are not infrequently cultivated from swabs from apparently healthy patients.

As with positive Diphtheria swabs, due caution must be exercised in the interpretation of the results and diagnosis and treatment is the responsibility of the clinician and not of the bacteriologist.

There is much evidence that undue reliance is made on swab examinations and laboratory assistance as a whole to the detriment of medicine and the public.

Efforts are at present being made in certain Research Laboratories to identify the strains of Streptococci commonly associated with infective conditions, and to classify them into types.

The stage has not been reached, however, when such differentiation can be carried out as a routine measure in a Public Health Laboratory.

(2) *Specimens in connection with Puerperal Fever.*

In addition to a number of throat swabs examined bacteriologically, particularly for Streptococci, in connection with the occurrence of Puerperal Fever, 27 specimens of uterine or vaginal discharge were received for bacteriological examination.

13 or 50 per cent. of these specimens contained Streptococci and 10 contained Staphylococci.

19 specimens of pus or discharge from the eyes of new-born babies were also received for microscopical or bacteriological examination.

(3) *Specimens in connection with Tuberculosis.*

The specimens examined for evidence of tuberculosis include :—

- (a) Specimens of sputum examined microscopically for tubercle bacilli. All specimens giving negative results on direct examination are re-examined by concentration methods.

- (b) Specimens of pus from abscesses, sinuses, &c., examined microscopically for tubercle bacilli.
- (c) Specimens of urine and fæces, examined microscopically for tubercle bacilli.
- (d) Specimens of cerebro-spinal, pleural and peritoneal fluids, examined cytologically and microscopically for tubercle bacilli.
- (e) Animal inoculation tests for tuberculosis.
- (f) Histological examination of tissues.

The number of specimens of sputum examined for tubercle bacilli was 7,038, of which 2,493 or 35.4 per cent. gave positive results.

30 specimens of sputum were submitted to special investigations in addition to search for tubercle bacilli, including general microscopical and cultural examination.

(4) *Specimens of Pus.*

88 specimens of pus were received and were submitted to the following examinations :—

Microscopical examination for cells and bacteria ..	88
Bacteriological examination by cultural methods ..	86
Microscopical examination for tubercle bacilli ..	85

The following results were obtained :—

Tubercle Bacilli were found in 18 specimens.
 Streptococci were found in 15 specimens.
 Staphylococci were found in 30 specimens.
 B. Coli were found in 1 specimen.

The remainder contained no significant bacteria.

(5) *Specimens of Urine.*

579 specimens of urine were examined as follows :—

(a) Chemical analysis	457
(b) General microscopical examination ..	478
(c) Microscopical examination for tubercle bacilli ..	446
(d) Bacteriological examination by cultural methods	239
(e) Special examinations	69

Of the 446 specimens examined for tubercle bacilli, 78 or 17.5 per cent. gave positive results.

Animal inoculation tests for tubercle bacilli were carried out on 24 specimens. (See paragraph 13).

(6) *Specimens of Fæces.*

292 specimens of fæces were received and submitted to the following investigations :—

(a) General microscopical examination..	24
(b) Microscopical examination for tubercle bacilli	166
(c) Bacteriological examination by cultural methods	126
(d) Examination for Occult Blood reaction ..	3
(e) Examination for Triboulet's reaction ..	27

Microscopical examination is made for abnormal constituents, parasites, ova, &c., and bacteriological examination is generally required for the detection of bacteria of the typhoid-paratyphoid-dysentery groups. Triboulet's reaction is said to give a positive result in cases of tuberculous ulceration of the intestines, but there is at present little evidence as to its reliability and value.

(7) *Specimens of Cerebro-Spinal and other Body Fluids.*

69 specimens, under this heading, were received, as follows :—

(a) Cerebro-Spinal Fluid ..	19 specimens.
(b) Pleural Fluid ..	45 specimens.
(c) Peritoneal Fluid ..	5 specimens.

These were all submitted to the following investigations :—

- (1) Chemical examination.
- (2) Cytological examination.
- (3) Microscopical examination for tubercle bacilli.
- (4) Cultural examination.

(8) *Enteric Fevers.*

Specimens examined in connection with typhoid-paratyphoid-dysentery and salmonella infections comprise samples of blood, fæces and urine. The latter have been included under paragraphs (5) and (6). Specimens of blood, included in paragraph 9, are submitted either for agglutination reactions or cultural examination.

A summary of the results given by the examination of specimens specially for enteric fever is as follows :—

37 specimens of Urine ..	0 positive.
113 specimens of fæces ..	8 positive.
241 specimens of blood ..	51 positive.

(9) *Specimens of Blood.*

325 specimens of blood were received for various examinations, as shown below :—

(a) Cultural examination	13
(b) Agglutination reactions :—	
(1) Typhoid-paratyphoid	249
(2) Dysentery	4
(3) Melitensis	8
(c) Cytological examination, differential cell counts	33
(d) Examination for malarial parasites ..	6
(e) Chemical analysis :—	
(1) Blood Urea Estimation	12
(2) Blood Calcium Estimation	1
(3) Blood Phosphates Estimation	1

It is of interest to record that one of the specimens examined for Malarial parasites gave a positive result. This patient suffered a typical attack of Malaria and there was no evidence that the disease was contracted out of Essex.

(10) *Specimens of Hair and Skin Scrapings.*

103 specimens were examined, of which 22 gave positive results.

(11) *Histological Examinations.*

16 specimens of tissue were submitted to histological examination.

(12) *Vaccines.*

3 autogenous vaccines were prepared from bacteria isolated from specimens of pus.

(13) *Animal Inoculation Tests.*

149 animal tests were carried out, as follows :—

- (1) 124 tests of Diphtheria bacilli for virulence.
41 or 33 per cent. proved to be virulent.
- (2) 24 tests on specimens of urine for tubercle bacilli.
12 or 50 per cent. gave positive results.
- (3) 1 test of pleural fluid for tubercle bacilli.

Group D. Specimens received from Public Assistance Hospitals.

The total number of specimens received from the Public Assistance Institutions was 1,942, an increase of 544 over 1934.

These specimens and the examinations carried out were as follows :—

(1) *Specimens of Blood.*

The total number of specimens of blood was 145, which were submitted for the following investigations :—

(a) Estimation of blood-sugar	..	..	40
(b) Estimation of blood-urea	..	..	32
(c) Counts of red and white cells	..	..	6
(d) Hæmoglobin estimation	..	..	6
(e) Cytological and differential counts	..	..	10
(f) Blood cultures	..	..	22
(g) Agglutination reactions :—			
(1) Typhoid-paratyphoid group	..	..	39
(2) Dysentery group	..	..	1
(3) Melitensis group	..	..	1

(2) *Specimens of Faeces.*

The total number of specimens received was 78 and the examinations carried out were :—

(a) General microscopical examination	..	..	25
(b) Microscopical examination for tubercle bacilli	..	..	12
(c) Bacteriological examination—cultural	..	..	74
(d) Chemical tests—for occult blood	..	..	12

(3) *Specimens of Urine.*

The total number of specimens was 192.

The examinations carried out were :—

(a) General microscopical examinations	..	..	158
(b) Microscopical examination for tubercle bacilli	..	..	136
(c) Chemical analysis	..	..	151
(d) Bacteriological examination—cultural	..	..	136
(e) Special examinations	..	..	10
(f) Animal inoculation tests	..	..	15

(4) *Specimens of Cerebro-Spinal Fluid.*

Total number of specimens 51

The examinations carried out were :—

(a) Cytological examination	..	..	50
(b) Chemical examination	..	..	48
(c) Microscopical examination for tubercle bacilli	..	..	51
(d) Bacteriological examination by cultures	..	..	51
(e) Special examinations	..	..	2

(5) *Specimens of Pleural Fluid.*

Total number of specimens 58

These were submitted to the following examinations :—

(a) Cytological examination	..	..	54
(b) Microscopical examination for tubercle bacilli	..	..	58
(c) Bacteriological examination by cultures	..	..	58

(6) *Other Body Fluids, Peritoneal, Joint, etc.*

Total number of specimens	..	..	..	15
---------------------------	----	----	----	----

These were examined as follows :—

(a) Cytological examination	..	..	15
(b) Microscopical examination for tubercle bacilli	..	..	15
(c) Bacteriological examination by cultures	..	..	15
(d) Chemical examination	..	..	1

(7) *Specimens of Pus.*

Total number of specimens	..	..	..	46
---------------------------	----	----	----	----

These were examined as follows :—

(a) General microscopical examination..	..	45
(b) Microscopical examination for tubercle bacilli	..	45
(c) Bacteriological examination by cultures	..	44

(8) *Specimens of Sputum.*

Total number of specimens	..	..	..	312
---------------------------	----	----	----	-----

These were submitted to the following examinations :—

(a) General microscopical examination..	..	17
(b) Microscopical examination for tubercle bacilli	..	312
(c) Bacteriological examination by culture	..	16

(9) *Swabs from Throat, Nose and Ear.*

The total number was	..	..	..	819
----------------------	----	----	----	-----

These were submitted to the following examinations :—

(a) General bacteriological examination, microscopical and cultural	..	..	29
(b) Examination for diphtheria bacilli	..	..	789
(e) Special examination for hæmolytic streptococci	..	..	27

(10) *Specimens of Urine and Vaginal Discharge.*

The total number of specimens was	..	..	..	39
-----------------------------------	----	----	----	----

These were all submitted to general bacteriological examination, microscopical and cultural, including special examination for hæmolytic streptococci.

(11) *Specimens of Eye Discharge.*

The total number of specimens was	..	..	..	41
-----------------------------------	----	----	----	----

The examinations comprised the following :—

(a) Microscopical examination	..	..	41
(b) Bacteriological examination by cultures	..	..	37

TABLE V.

Showing Accommodation, Number of Cases treated, Cost per Bed, etc., at those Isolation Hospitals for which Grants for Beds provided out of Loan were recommended for the Year ended 31st March, 1935.

	Billerica.	Braintree.	Chelmsford.	Clacton.	Colchester.	Dunmow.	Grays and Orsett.	Halstead.	Ilford.	Maldon.	Rochford.	Romford.	Saffron Walden.	Walthamstow.	Waltham Joint.	TOTAL.
Number for purpose of Grant	30	14	21	17	58	8	48	16	150	10	12	141	14	81	42	662
Grant from County Council	£170	£80	£115	£85	£300	£50	£260	£90	£760	£80	£70	£725	£80	£425	£230	£3300
Cases treated during year:—																
Diphtheria	63	25	11	23	72	1	199	5	295	38	92	923	5	266	79	2097
Scarlet Fever	119	83	162	29	397	47	180	24	306	145	69	714	61	496	227	3028
Typhoid	2	...	1	1	4	...	1	2	2	...	...	...	...	...	1	14
Other Diseases	22	3	15	5	*142	2	53	14	*92	2	1	54	3	*50	...	458
Total number of cases treated	206	111	189	58	615	50	433	45	695	185	162	1691	69	781	307	5597
Bed-Days	5235	7286	4499	2524	28709	1981	15961	1181	34943	5890	5268	62475	2512	22678	11677	208419
Expenditure for the year:—	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Repayment of Loans...	390 11 10	...	108 4 4	...	203 0 1	...	775 1 11	64 0 0	2212 10 5	36 4 4	50 1 8	2481 1 5	144 4 8	536 0 9	69 10 11	7070 12 4
Interest on loan	418 7 0	...	19 8 8	...	101 0 6	...	692 16 7	32 18 9	1987 1 3	11 17 10	22 6 9	4668 6 4	61 18 9	575 17 6	81 16 8	8673 16 7
Total	£ 808 18 10	...	127 13 0	...	304 0 7	...	1467 18 6	96 18 9	4199 11 8	48 2 2	72 8 5	7149 7 9	206 3 5	1111 18 3	151 7 7	15744 8 11
Structural Repairs	361 15 9	70 19 7	279 18 2	47 10 9	389 7 1	187 10 9	177 2 3	183 3 0	1634 6 5½	78 13 2	78 8 8	2198 17 7½	133 12 4	2467 8 10	99 12 1	8438 6 6
Food (Patients and Staff)	2008 5 10	475 11 4½	721 4 11	356 11 2	1327 15 4	422 8 11	1841 13 9½	221 5 2	4058 10 3	626 11 5	691 3 9	5894 17 4½	234 7 7	4091 3 1	1072 11 2	23954 1 1
Estab. and Patients' Expenses	1886 7 0	1876 14 4½	1385 16 1½	791 0 1	6010 16 2	731 16 4	4509 16 0½	1324 14 2½	15876 15 9½	1958 1 0	1214 17 6	22487 18 0½	614 14 3	12292 8 1½	4892 12 9	77814 7 9
Maintenance...	4256 8 7	2423 5 4	2386 19 3	1195 2 0	7727 18 7	1341 16 0	6528 12 1	1729 2 4	21619 12 6	2663 5 7	1984 9 11	30581 13 0	982 14 2	18721 0 0	6064 16 0	116206 15 4
Overhead Charges	808 18 10	...	127 13 0	...	304 0 7	...	1467 18 6	96 18 9	4199 11 8	48 2 2	72 8 5	7149 7 9	206 3 5	1111 18 3	151 7 7	15744 8 11
Total	£ 5055 7 5	2423 5 4	2514 12 3	1195 2 0	8031 19 2	1341 16 0	7998 10 7	1826 1 1	28819 4 2	2711 7 9	2056 18 4	37731 0 9	1188 17 7	19832 18 3	6216 3 7	125951 4 3
Cost per patient per week	£ 6 15 5	5 17 7	3 18 3	3 6 3	1 19 2	4 14 10	3 10 2	10 16 6	5 3 5	3 4 5	2 14 8	4 4 7	3 6 3	6 2 5	3 14 6	4 4 7
" " Food, Struct. and Estab. Ex.	£ 5 13 10	5 17 7	3 14 3	3 6 3	1 17 9	4 14 10	2 17 3	10 5 0	4 6 7	3 3 4	2 12 9	3 8 6	2 14 9	5 15 7	3 12 8	3 14 0
Cost per case treated, 1934-35	£ 24 11 9	21 16 8	13 6 1	20 12 1	13 1 2	26 16 8	18 9 4	40 11 7	37 3 0	14 13 1	12 13 11	22 6 3	17 4 7	25 7 10	20 4 11	22 10 1
" " year 1933-34	£ 12 7 4	38 16 4	15 4 9	28 4 6	17 15 6	16 14 7	20 1 5	16 7 4	40 14 8	23 3 7	11 17 9	22 9 11	27 15 6	21 14 1	22 8 11	22 6 9

* Includes Tuberculosis cases treated under the County Council scheme.

† Estimated, as actual figure not available.

Observation	Observation	Observation	Observation	Observation
1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	30
31	32	33	34	35
36	37	38	39	40
41	42	43	44	45
46	47	48	49	50
51	52	53	54	55
56	57	58	59	60
61	62	63	64	65
66	67	68	69	70
71	72	73	74	75
76	77	78	79	80
81	82	83	84	85
86	87	88	89	90
91	92	93	94	95
96	97	98	99	100

(12) *Specimens of Hairs.*

The total number of specimens was 8

These were examined microscopically for ringworm fungus.

(13) *Specimens of Tissue—Histological Examinations.*

The total number of specimens was 121

(14) *Miscellaneous Examinations.*

The total number of specimens included under this heading is 16.

They consisted of the following :—

(a) Animal inoculation tests for tubercle bacilli ..	6
(b) Animal test for virulence of diphtheria bacilli ..	1
(c) Preparation of autogenous vaccine ..	1
(d) Specimens of vomit—bacteriological examinations	4
(e) Sample of Human milk—chemical analysis ..	1
(f) Specimens of cat-gut—bacteriological examinations	3

LOCAL GOVERNMENT ACT, 1929.

SECTION 46. REVIEW OF COUNTY DISTRICTS. On the 30th December, 1935, the Ministry of Health issued an Order approving of the County Council's proposals that as from 1st April, 1936, the Urban Districts of Grays Thurrock, Tilbury, Purfleet and the Rural District of Orsett be formed into one Urban District to be known as the Thurrock Urban District. This completed the County Review under Section 46 of the Local Government Act, 1929.

SECTION 57. Full details of the County Scheme for making contributions to District Councils were set out in the Report for 1934. Particulars regarding the grants approved during the year are given in the section headed "Water Supplies"—see page 52.

SECTION 58. In the Report for 1934 full particulars were included of the County Scheme adopted on the 3rd July, 1934, for securing that every Medical Officer of Health subsequently appointed would be restricted by the terms of his employment from engaging in private practice as a medical practitioner.

In January, 1934, the post of Medical Officer of the Borough of Harwich and Port Sanitary Authority became vacant as a result of the death of Dr. G. Ford Porter. To fill the vacancy a part-time officer was temporarily engaged, but in 1936 a whole-time Medical Officer of Health was appointed in accordance with Part II of the above-mentioned Scheme.

ISOLATION HOSPITALS.

Table V on page 35a summarises the number of beds, number of patients treated and the cost per patient per week at the fifteen Isolation Hospitals which received grants under the County Scheme.

It will be noted that the average cost per patient viz., £22 10s. 1d., is approximately the same as in 1934.

The grants paid by the County Council are at the rate of £5 per annum per bed provided out of loan, plus £10 per annum in respect to each ambulance maintained by a Hospital in an efficient condition. In addition, grants at the rate of £2 10s. 0d. per annum per bed provided out of revenue were paid in respect to the hospitals at Colchester (40 beds) Dunmow (4 beds), Halstead (4 beds) and Orsett (48 beds).

By letter, dated 26th June, 1935, the Minister of Health approved of the County Council's Scheme (with modifications) for securing the provision of suitable means for the proper isolation and treatment of persons suffering from infectious diseases, in accordance with Section 63 of the Local Government Act, 1929. A copy of the scheme was included in the report of 1934. Part I dealt with Infectious Diseases other than smallpox, and Part II dealt with smallpox.

PART I—INFECTIOUS DISEASES OTHER THAN SMALLPOX. The scheme provides for reducing the number of Hospital Authorities and Joint Hospital Boards from twenty to ten. At the time of writing, one area has decided to form a Joint Hospital Board; in two areas the authorities concerned have held conferences with a view to the conclusion of agreements under Section 131 of the Public Health Act, 1875. One Joint Hospital Board has applied for a Provisional Order to extend their district in accordance with the Scheme, and has already greatly enlarged its Hospital, and in two areas no information is at present available as to any action which may have been taken by the Authorities concerned. In the remaining four areas no further action was required by the Authorities concerned under the Scheme.

PART II—SMALLPOX. Under the Scheme the Essex County Council is now an authority for providing accommodation for the treatment of cases of smallpox occurring in the Administrative County, exclusive of the Borough of Colchester. By an agreement between the Essex County Council and the Corporation of Colchester, a smallpox hospital with 24 beds has been provided, adjacent to the Isolation Hospital situated in Mill Road, Mile End, Colchester. It was opened officially by the Chairman of the County Council on 27th April, 1936.

In addition, the Essex County Council has an informal arrangement with the London County Council, under which the latter will receive Essex patients into their smallpox hospital so long as they have sufficient accommodation available.

HOUSING.

Table VI on page 36a gives particulars of the work carried out under the Public Health and Housing Acts by the Local Sanitary Authorities during the year 1935. The principal items included in that table are compared below with the figures for the year 1934 :—

TABLE VI.

SHOWING PARTICULARS OF WORK CARRIED OUT BY LOCAL SANITARY AUTHORITIES UNDER THE PUBLIC HEALTH AND HOUSING ACTS DURING THE YEAR 1935.

SANITARY DISTRICT.	NEW HOUSES ERUPTED DURING 1935.			INSPECTION OF DWELLING HOUSES DURING THE YEAR.							ACTION UNDER STATUTORY POWERS.										
	Total.	By		(a) Total No. inspected for Housing Defects under Public Health or Housing Acts.	(b) No. of Inspections made for the purpose.	(c) No. of Dwelling-houses under sub-sec (a) which were inspected and worked under Housing Consolidated Regs. 1925.	(d) No. of Inspections made for the purpose.	(e) No. found to be in a state so dangerous or insanitary as to be unfit for human habitation.	(f) No. (excluding those referred to under (e)) found not to be in all respects reasonably fit for human habitation.	No. of defective Dwelling Houses rendered fit in consequence of informal action by the Local Authority or their Officers.	PROCEEDINGS UNDER SECTIONS 17, 18 AND 22 OF THE HOUSING ACT, 1930.			PROCEEDINGS UNDER PUBLIC HEALTH ACT.		PROCEEDINGS UNDER SECTIONS 19 & 21 OF HOUSING ACT, 1930.		PROCEEDINGS UNDER SECTION 20 OF HOUSING ACT, 1930.			
		The Local Authority	Other Local Authorities								Other Bodies or Persons.	No. of Dwelling Houses in respect of which Notices were served requiring repairs.	No. of Dwelling Houses which were rendered fit after service of formal Notices.	No. of Dwelling Houses in respect of which Notices were served requiring repairs.	No. of Dwelling Houses which were rendered fit after service of formal Notices.	No. of Dwelling Houses in respect of which Demolition Orders were made.	No. of Dwelling Houses demolished in pursuance of Demolition Orders.	No. of separate Tenements or Underground Rooms in respect of which Closing Orders were made.	No. of separate Tenements or Underground Rooms in respect of which Closing Orders were made.		
URBAN.																					
BARKING B.	563	168	162	233	3437	8730	87	2404	47	2191	1790	170	143	2	231	140	21	..	3	..	..
BENFLEET	352	..	..	352	180	287	109	140	2	139	98	5	3	..	63	54	7	2	3	..	..
BILDERGAY	499	..	..	499	1640	1862	273	457	21	139	19	70	51	2	503	423	..	8	3	..	..
BRAINTREE & BOCKING	114	..	..	114	423	1259	47	417	2	195	184	17	15	2	4	4	..	10	7	..	..
BRAINTREE	286	..	..	286	411	1436	56	128	32	38	22	3	4	..	..	..	2	4	..	..	..
BRIGHTLINGSEA	40	..	..	40	40	40	36	36	..	34	87	..	..	..	4	4	..	..	..	..	..
BURNHAM-ON-CROUCH	15	..	2	13	110	180	110	180	..	10	10	..	..	..	2	2	..	..	..	..	..
CARVEY ISLAND	225	..	..	225	40	172	31	141	..	22	11	2	8	..	3	6	..	1	4	..	..
CHELMSFORD B.	234	..	..	234	987	1636	..	..	5	30	30	..	..	..	237	249	..	..	..	..	..
CHISWELL	359	..	..	359	143	478	80	362	..	54	137	..	..	..	..	..	..	..	..	..	..
CHINGFORD	736	..	..	736	977	3752	87	1254	2	70	404	6	..	..	9	7	..	..	2	..	..
CLACTON-ON-SEA	665	..	..	665	725	1561	177	644	..	209	115	..	..	..	8	8	..	..	3	..	..
COLCHESTER B.	446	66	..	446	380	1085	3471	522	2237	80	926	33	26	3	30	29	4	103	72	..	..
DAGENHAM	560	..	..	560	1652	4676	125	2526	4	255	213	1	..	..	363	368	..	4	..	..	..
EPSTEY	100	..	..	100	49	150	10	16	1	9	24	9	9	..	15	15	..	..	..	..	..
PRESTON & WALTON	93	..	..	93	36	52	14	14	3	26	20	..	..	..	..	..	..	..	..	..	..
GRAVESEND	169	..	..	169	678	1356	335	905	1	340	340	..	..	..	..	..	..	..	..	..	..
HALSTED	35	24	..	11	314	829	57	57	57	257	159	86	74	..	..	..	..	57	33	2	..
HARVEY B.	98	..	..	98	31	93	20	20	1	..	23	10	2	..	..	7	..	3	..	..	..
HORNCHURCH	1447	6	..	1441	1199	2690	453	1639	11	462	183	..	..	..	23	15	3	6	9	..	..
LYFORD B.	2092	..	..	2092	1359	3037	112	671	12	642	585	106	128	..	6	5	..	4	4	..	..
LETON B.	110	..	..	110	3471	13066	972	3686	14	1704	1986	1	..	..	1	1	..	13	12	..	..
MALDON B.	101	26	..	75	263	627	129	387	10	118	27	77	64	..	14	14	..	10	..	..	..
NETLEY	118	108	10	259	1374	41	49	..	259	253	..	..	..	..	..	..	..	..	..	..	..
RAYLEIGH	75	6	..	69	174	238	60	72	1	174	62	32	30	1	80	73	..	1	1	..	..
ROMFORD	748	68	..	680	566	1062	349	416	18	334	313	..	..	..	2	2	..	12	34	..	..
SAFFRON WALDEN B.	17	..	..	17	787	869	..	..	28	10	13	..	..	..	..	..	..	..	12	..	..
THURNEY	2	..	..	2	827	3266	411	1896	..	758	425	186	159	..	147	147	..	..	..	..	..
WALTHAM HOLY CROSS	24	..	..	24	284	336	234	296	2	148	164	12	10	..	..	..	..	..	..	..	..
WALTHAMSTOW B.	420	*20	..	1400	4183	15580	1192	4862	..	2664	2641	120	108	1	20	20	..	..	..	..	..
WATFORD	1384	..	..	1384	832	3172	247	1126	..	550	506	..	..	..	..	..	..	3	..	..	..
WEST MERESEA	30	..	..	30	57	63	57	67	..	12	12	..	..	..	..	..	..	..	..	..	..
WITHAM	36	..	..	36	30	30	23	23	21	2	..	..	..	..	..	..	..	19	3	..	..
WIVERTON	5	..	..	5	82	215	7	10	3	10	12	..	..	..	4	5	..	8	8	..	..
URBAN TOTAL	12198	532	164	11482	27301	77595	8663	26528	385	12731	11485	946	834	11	1819	1598	35	264	220	4	..
RURAL.																					
BRAINTREE	64	..	..	64	561	711	561	711	63	448	127	..	1	..	..	..	..	42	22	1	..
CHELMSFORD	251	25	..	226	403	1348	472	1246	31	127	54	..	..	..	43	44	..	23	14	..	..
DERHAM	74	2	..	72	558	878	558	878	71	202	120	2	1	..	..	..	..	34	2	..	..
EPSTEY	184	46	..	138	564	1965	403	1763	22	355	346	1	1	..	16	19	..	7	3	..	..
HALSTED	67	32	..	35	335	754	99	367	48	93	93	..	..	..	30	20	..	22	13	..	..
LENDEN AND WIMBORNE	116	..	..	116	1401	31550	479	1738	4	435	377	8	8	..	4	5	..	18	16	..	..
MALDON	74	..	..	74	360	1527	226	782	27	47	46	26	20	..	2	2	..	11	13	1	1
OPGAR	97	..	..	97	460	500	..	..	97	220	250	..	..	..	..	..	..	12	..	..	..
OSSETT	439	2	..	437	342	1202	192	858	10	175	149	16	7	..	18	11	..	3	..	..	..
ROCHFORD	364	62	..	302	208	447	62	93	35	61	35	17	40	..	9	10	..	16	14	1	..
SAFFRON WALDEN	64	8	..	56	682	930	571	719	42	66	61	16	16	..	..	..	..	2	..	..	..
TENDRING	188	18	..	170	321	392	321	392	7	106	45	15	15	..	1	1	..	10	11	..	..
RURAL TOTAL	1982	195	—	1787	6285	13804	3914	9497	457	2495	1703	101	109	..	113	112	..	197	111	3	1
BORO' & URBAN TOTAL	12198	532	164	11482	27301	77595	8663	26528	385	12731	11485	946	834	11	1819	1598	35	264	220	4	..
TOTAL FOR ADMINISTRATIVE COUNTY	14180	747	164	13269	33586	91399	12577	36025	842	15226	13188	1047	943	11	1932	1710	35	461	331	7	1

† 62 Houses, 58 Flats.

* 8 Houses, 12 Flats.

† 362 Houses, 38 Flats.

SHOWING THE RESULTS OF THE
CENSUS OF 1900

Total		Male		Female	
Population	White	Population	White	Population	White
1000	1000	500	500	500	500
2000	2000	1000	1000	1000	1000
3000	3000	1500	1500	1500	1500
4000	4000	2000	2000	2000	2000
5000	5000	2500	2500	2500	2500
6000	6000	3000	3000	3000	3000
7000	7000	3500	3500	3500	3500
8000	8000	4000	4000	4000	4000
9000	9000	4500	4500	4500	4500
10000	10000	5000	5000	5000	5000
11000	11000	5500	5500	5500	5500
12000	12000	6000	6000	6000	6000
13000	13000	6500	6500	6500	6500
14000	14000	7000	7000	7000	7000
15000	15000	7500	7500	7500	7500
16000	16000	8000	8000	8000	8000
17000	17000	8500	8500	8500	8500
18000	18000	9000	9000	9000	9000
19000	19000	9500	9500	9500	9500
20000	20000	10000	10000	10000	10000
21000	21000	10500	10500	10500	10500
22000	22000	11000	11000	11000	11000
23000	23000	11500	11500	11500	11500
24000	24000	12000	12000	12000	12000
25000	25000	12500	12500	12500	12500
26000	26000	13000	13000	13000	13000
27000	27000	13500	13500	13500	13500
28000	28000	14000	14000	14000	14000
29000	29000	14500	14500	14500	14500
30000	30000	15000	15000	15000	15000
31000	31000	15500	15500	15500	15500
32000	32000	16000	16000	16000	16000
33000	33000	16500	16500	16500	16500
34000	34000	17000	17000	17000	17000
35000	35000	17500	17500	17500	17500
36000	36000	18000	18000	18000	18000
37000	37000	18500	18500	18500	18500
38000	38000	19000	19000	19000	19000
39000	39000	19500	19500	19500	19500
40000	40000	20000	20000	20000	20000
41000	41000	20500	20500	20500	20500
42000	42000	21000	21000	21000	21000
43000	43000	21500	21500	21500	21500
44000	44000	22000	22000	22000	22000
45000	45000	22500	22500	22500	22500
46000	46000	23000	23000	23000	23000
47000	47000	23500	23500	23500	23500
48000	48000	24000	24000	24000	24000
49000	49000	24500	24500	24500	24500
50000	50000	25000	25000	25000	25000
51000	51000	25500	25500	25500	25500
52000	52000	26000	26000	26000	26000
53000	53000	26500	26500	26500	26500
54000	54000	27000	27000	27000	27000
55000	55000	27500	27500	27500	27500
56000	56000	28000	28000	28000	28000
57000	57000	28500	28500	28500	28500
58000	58000	29000	29000	29000	29000
59000	59000	29500	29500	29500	29500
60000	60000	30000	30000	30000	30000
61000	61000	30500	30500	30500	30500
62000	62000	31000	31000	31000	31000
63000	63000	31500	31500	31500	31500
64000	64000	32000	32000	32000	32000
65000	65000	32500	32500	32500	32500
66000	66000	33000	33000	33000	33000
67000	67000	33500	33500	33500	33500
68000	68000	34000	34000	34000	34000
69000	69000	34500	34500	34500	34500
70000	70000	35000	35000	35000	35000
71000	71000	35500	35500	35500	35500
72000	72000	36000	36000	36000	36000
73000	73000	36500	36500	36500	36500
74000	74000	37000	37000	37000	37000
75000	75000	37500	37500	37500	37500
76000	76000	38000	38000	38000	38000
77000	77000	38500	38500	38500	38500
78000	78000	39000	39000	39000	39000
79000	79000	39500	39500	39500	39500
80000	80000	40000	40000	40000	40000
81000	81000	40500	40500	40500	40500
82000	82000	41000	41000	41000	41000
83000	83000	41500	41500	41500	41500
84000	84000	42000	42000	42000	42000
85000	85000	42500	42500	42500	42500
86000	86000	43000	43000	43000	43000
87000	87000	43500	43500	43500	43500
88000	88000	44000	44000	44000	44000
89000	89000	44500	44500	44500	44500
90000	90000	45000	45000	45000	45000
91000	91000	45500	45500	45500	45500
92000	92000	46000	46000	46000	46000
93000	93000	46500	46500	46500	46500
94000	94000	47000	47000	47000	47000
95000	95000	47500	47500	47500	47500
96000	96000	48000	48000	48000	48000
97000	97000	48500	48500	48500	48500
98000	98000	49000	49000	49000	49000
99000	99000	49500	49500	49500	49500
100000	100000	50000	50000	50000	50000

TABLE VII.

36b

SUMMARY OF RETURNS RECEIVED FROM COUNCILS OF RURAL DISTRICTS IN REGARD TO HOUSING CONDITIONS OF THE WORKING CLASSES—1935.

RURAL DISTRICT.	TOTALLY UNFIT HOUSES.			PARTIALLY UNFIT HOUSES.			ESTIMATED NO. OF HOUSES REQUIRED TO 31ST MARCH, 1936.				PROPOSED NEW HOUSES TO 31ST MARCH, 1936.			
	On 31st December, 1934.		Demolished from 1st January, 1934, to 31st December, 1934.	On 31st December, 1934.		Rendered habitable from 1st January, 1934, to 31st December, 1934.	To meet overcrowding.		To meet normal expansion.		Approved by Minister.		Not yet approved by Minister.	
	Occupied.	Unoccupied.		Occupied.	Unoccupied.		Agricultural Workers.	Others.	Agricultural Workers.	Others.	Agricultural Workers.	Others.	Agricultural Workers.	Others.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Braintree	105	33	21	387	11	82	(a)	(a)	(a)	(a)	88	19	(a)	(a)
Chelmsford	56	9	3	58	—	97	(b)	(b)	140	229	—	—	140	210
Dunmow	70	10	2	86	3	60	29	—	54	24	40	—	14	—
Epping	2	9	10	152	—	250	25	—	(c)	(c)	28	—	20	—
Halstead (d)	52	30	12	68	7	121	14	2	12	—	20	52	—	—
Lexden & Winstree	13	13 (e)	10	118	2	238	2	—	—	120 (f)	—	—	—	—
Maldon	22	17	4 (g)	22	3	92	—	—	(b)	(b)	—	—	—	—
Ongar	26	8	—	206	—	382	12	—	118	98	—	—	—	—
Orsett	2	21	5	62	—	160	—	—	—	283	—	—	(i)	(i)
Rochford	18	9	12	79	2	86	9	22	14	32	20	72	6	8
Saffron Walden	30	10	—	102	2	185	104	20	—	—	—	—	—	—
Tendring	4	3	15 (j)	—	—	128	—	—	—	—	7	11	8	22
TOTALS	400	172	94	1340	3	1881	195	49	1124		357		188	240

NOTES.

(a) Unknown at present.

(b) There is little or no overcrowding in the district on the basis of the new Housing Bill.

(c) Private enterprise appears to be providing the houses for the expansion of the population and industry. The Council has constant regard to the sufficiency of houses and is always ready to erect further houses as the need arises. It is impossible to make anything like an accurate estimate.

(d) The Sanitary Inspector for the Belchamp area died on the 16th July, 1935, after a long illness and he had made no attempt to prepare this Return for his area. The figures given are the best available, but the totals may be slightly inaccurate, especially in columns 5 and 6, as no particulars could be found in regard to such columns for the Belchamp area.

(e) In addition undertakings "Not to let" have been accepted under Section 19 of the Housing Act, 1930, dealing with 18 unoccupied houses.

(f) The District Council's Public Health Committee are of the opinion that private enterprise will meet the needs of the district so far as the total number of unfit and overcrowded houses is concerned.

(g) In addition to the four houses demolished, 32 have been re-conditioned and 1 has been utilised for other purposes than a dwelling.

(h) About 70 houses per annum would be sufficient to meet the needs of the district and it is probable that the majority of this number will be built by private enterprise. Less than half this number would be required for agricultural workers.

(i) Nil, except so far as proposals for erection of houses for aged persons are concerned.

(j) Eleven by formal Notice, 4 by informal Notice.

	1934.	1935.
No. of new houses erected	14,674 ..	14,180
No. of houses inspected for housing defects ..	35,874 ..	33,586
No. of inspections made for the purpose ..	88,851 ..	91,399
No. of houses found to be totally unfit for human habitation	801 ..	842
No. of houses found not to be in all respects reasonably fit for human habitation	14,806 ..	15,226
No. of houses rendered fit in consequence of informal action	12,951 ..	13,188

RURAL DISTRICTS. Under the Housing Act, 1930, a definite duty is placed upon the County Council "as respects each rural district within the County, to have constant regard to the housing conditions of persons of the working classes, the extent to which overcrowding or other unsatisfactory housing conditions exist and the sufficiency of the steps which the Council of the district have taken, or are proposing to take, to remedy those conditions and to provide further housing accommodation."

To assist the County Council in carrying out that duty, each Rural District Council furnished their fourth return (for the year 1934) in regard to housing conditions of persons of the working classes. A summary of these returns is given in Table VII on page 36b.

According to these returns, there was a decrease in the number of totally unfit houses and partially unfit houses dealt with during the year ended 31st December, 1934. There was, however, a slight increase of 12 in the number of houses demolished during that period, but it is anticipated that this number will be much further increased in view of the fact that more attention is being paid by Rural District Councils to the question of dealing with properties as clearance areas under Part I of the Housing Act, 1930. The figures provided under the heading of "Overcrowding" were given before the survey was carried out as required by the Housing Act, 1935, and therefore the correct position will be available for recording in next year's return.

With regard to houses needed to meet normal expansion, six Rural District Councils considered that either private enterprise will meet those needs, or that there are no existing needs. The outstanding needs in this respect were in the following districts :—Chelmsford R. (369) ; Ongar R. (216) ; and Orsett R. (283).

A perusal of the columns dealing with proposed new houses shows that in four Rural Districts there were no proposals for new houses.

No further action was taken in the way of following up these returns, as it was felt that Rural District Councils were fully occupied in dealing with the additional duties placed upon them under the Housing Act, 1935, particularly in respect to overcrowding. Each Rural District Council has been asked to furnish the County Council with a copy of the return of overcrowding which they make to the Minister of Health.

HOUSING ACT, 1935. This Act, which was placed on the Statute Book in August, 1935, gives local authorities new powers and imposes upon them new duties in relation to the abatement of overcrowding and the re-development of congested areas. It

provides for the consolidation of the housing accounts of local authorities, for the continuation of the subsidy under the Housing Act, 1930, at its present rate until 31st March, 1938, and for a new form of Exchequer assistance towards the cost of re-housing overcrowded persons, and makes many important amendments and additions to the housing powers of local authorities.

GENERAL. Housing in rural areas undoubtedly presents a difficult problem. Firstly, there is unhappily a large number of houses which, in the light of modern standards, are quite unfit for human habitation and which cannot be made fit except perhaps at an unreasonable cost. Secondly, in dealing with unfit houses, regard must be had to the importance of ensuring that in providing for the demolition or re-conditioning of houses or the erection of new houses every endeavour is made to maintain as far as possible the normal appearance of the locality. Thirdly, it is imperative that such re-conditioned or new houses should be available at rents within the means of the rural worker. Fourthly, it is desirable, as far as possible, economically or otherwise, to preserve any houses which are of architectural, artistic or historic interest, either as buildings or houses made fit for human habitation. Assistance to this end can be obtained either from voluntary sources or under the Housing (Rural Workers) Act, 1926, to which reference is made elsewhere in this report. See below.

Splendid service has been rendered by Local Authorities since the War in securing repairs to defective houses, demolishing unfit houses, and in providing new houses. But it is significant that as recently as April, 1933 the Ministry of Health had to state "that His Majesty's Government have given very careful consideration to a matter that deeply and urgently concerns social welfare, the clearance of slums and the improvement of bad housing conditions." Further, that "the present rate at which the slums are being dealt with is too slow."

Part I of the Housing Act, 1930, simplified the procedure and facilitated the task of clearing away existing slums, but several rural districts delayed taking action thereunder, preferring in some instances to deal with individual unfit houses under Section 19 of the 1930 Act. Visits to those areas by a Housing Inspector from the Ministry of Health have resulted in definite action being taken in every case to expedite the work of dealing with groups of unfit houses (2 or more) as clearance areas under Part I of the 1930 Act. In this connection, assistance has been rendered by the County Health Inspector, who also gave evidence at several Public Inquiries in those cases where owners had submitted objections to the Ministry of Health.

It is now generally accepted that every citizen should have a healthy environment in which to live, and decent housing is an indispensable element in such an environment. The present campaign for dealing with unfit houses is one of the greatest tasks ever undertaken by Rural District Councils, and provided the campaign is sustained it will eventually solve one of the worst evils existing in the countryside.

HOUSING (RURAL WORKERS) ACT, 1926-1931.

The information given below has been kindly supplied by the County Land Agent.

During the year 1935, 83 Forms of Application were received, applying for Grants in respect of 169 cottages.

The Districts in which the cottages are situate are as under :—

District.	No. of Applications.	No. of Cottages.	No. of Cottages in respect of which Grants have been made.	Total Grants in the year. £
Braintree R.	12	32	22	1,799
Chelmsford R.	9	19	13	1,189
Dunmow R.	7	10	7	700
Epping R.	2	5	3	300
Halstead R.	18	37	23	2,270
Lexden & Winstree R.	4	6	1	96
Maldon R.	8	16	3	300
Ongar R.	2	4	2	200
Orsett R.	1	1	—	—
Rochford R.	2	4	2	200
Saffron Walden R.	8	18	11	1,067
Tendring R.	4	6	3	300
Braintree & Bocking U.	4	8	2	200
Billericay U.	1	1	—	—
Clacton U.	1	2	—	—
	83	169	92	£8,621

Of the cottages included in the above applications, 92 were approved for Grants, 13 were not approved, 13 were withdrawn, and 51 were under consideration at the end of the year.

The total number of cottages approved for re-conditioning under the Act in Essex up to the 31st December, 1935, is 593. The total amount of Grants is £52,806, and it is estimated that the expenditure made in addition, by the owners themselves, exceeded the sum of £45,036.

Particulars of three typical cases of cottages reconstructed or improved by Grants made by the County Council under the Act during 1935 are set out hereunder :—

(1) *Parish of Great Sampford.*

Three timber-built, part weatherboard, part plaster, part tiled, part thatched cottages and a saddler's shop :—

Roofs stripped and tiled. New chimney erected, part of other chimneys re-built. New windows, doors and floors. Walls re-plastered, weatherboarding made good. New partitions and staircases. New E.C.'s, Food Stores and Cupboards. Water laid on from main.

Grant made to owner—£300.

Estimated total expenditure—£600.

(2) *Parish of Great Leighs.*

Two timber built, plaster and thatched cottages :—

New addition erected at one end to provide parlour and scullery, with bedroom over. Roofs stripped and tiled. External walls replastered. New staircases, floors, food stores, sinks, coppers and stoves.

Grant made to owner—£200.

Estimated total expenditure—£435.

(3) *Parish of Hatfield Broad Oak.*

Timber built on part brick foundations, plain tiled cottage with a brick built and tiled barn :—

New addition erected to connect present cottage to barn to form bungalow. Barn re-roofed, new chimneys, new staircases, floors, doors, windows, sinks, coppers and stoves.

Grant made to owner—£200.

Estimated total expenditure—£325.

SEWAGE WORKS AND RIVERS POLLUTION.

LOANS During the year one Urban District and three Rural Districts made application to the Ministry of Health for sanction to borrow sums of money, a gross total of £103,775, for works of sewerage and sewage disposal. Public Inquiries were held on the dates shown in the following table :—

Date of Inquiry.	Local Sanitary Authority.	Catchment Area.	Loan required.	Purpose.
1935. 1st May ..	Ongar Rural ..	Roding ..	£ 32,790 ..	Sewerage and sewage disposal— Chipping Ongar High Ongar Marden Ash Shelley Stanford Rivers Greensted
22nd August ..	Chelmsford Rural ..	Crouch ..	18,735 ..	Sewerage and sewage disposal— Runwell
1st November	Dunmow Rural ..	Lee ..	16,000 ..	Sewerage and sewage disposal— Hatfield Broad Oak
6th November	Clacton Urban ..	Sea ..	36,250 ..	Sewerage
		Total ..	£103,775	

INSPECTIONS. Pressure of other duties in connection with the milk supply of the County resulted in fewer visits to Sewage Works, the number for 1935 being 116, whilst the figure for 1934 was 288. During these visits 125 samples of effluents were obtained, 81 being satisfactory or on the border-line and 44 or 36 per cent. being unsatisfactory. (See Table VIII on page 41). Appropriate representations were made in regard to each unsatisfactory sample and in consequence Local Authorities carried out or proceeded

TABLE VIII.

SHOWING SEWAGE WORKS, NUMBER OF VISITS, AND NUMBER OF SAMPLES TAKEN DURING THE YEAR 1935.

Catchment Area.	Sewage Works.	Sanitary District.	No. of Visits.	Samples taken.		
				No. satisfactory or on border line.	No. unsatisfactory.	Total.
Brain ..	Braintree ..	Bra'tree & Bocking U.	2	—	2	2
Blackwater ..	Bocking ..	"	2	1	1	2
	Coggeshall ..	Braintree R...	1	—	1	1
	Kelvedon ..	"	3	3	—	3
	Silver End ..	Witham U. ..	2	1	1	2
	Witham ..	"	3	3	—	3
Roding ..	Buckhurst Hill ..	Chigwell U. ..	2	2	—	2
	Chigwell ..	"	1	1	—	1
	Chigwell Row ..	"	2	3	—	3
	Epping (Southern) ..	Epping U. ..	2	—	2	2
	Grange Hill ..	Chigwell U. ..	2	2	—	2
	Loughton ..	"	2	2	—	2
	Moreton ..	Ongar R. ..	1	1	—	1
	North Weald ..	Epping R. ..	3	2	1	3
	Ongar ..	Ongar R. ..	1	1	1	2
	Theydon Bois ..	Epping R. ..	2	2	—	2
	Thornwood ..	"	1	1	—	1
	Wanstead ..	Wanst'd & Woodf'd U	2	2	—	2
	Woodford ..	"	3	3	—	3
Chelmer ..	Chelmsford ..	Chelmsford B. ..	2	—	2	2
	Dunmow ..	Dunmow R. ..	2	2	—	2
	Felstead (Village) ..	"	2	—	2	2
	Thaxted ..	"	2	2	—	2
Ter ..	Hatfield Peverel ..	Braintree R. ..	3	1	2	3
Wid ..	Billericay ..	Billericay U. ..	2	2	—	2
	Great Warley ..	Brentwood U. ..	1	—	1	1
	Ingatestone ..	Chelmsford R. ..	2	1	1	2
	Shenfield, Hutton and Ingrave ..	Brentwood U. ..	2	2	—	2
Colne ..	Halstead ..	Halstead U. ..	3	1	2	3
	Sible Hedingham ..	Halstead R. ..	2	1	1	2
	Tiptree ..	Lexden & Winstree R.	3	3	—	3
	East Donyland ..	"	1	—	1	1
Ingrebourne ..	Brentwood ..	Brentwood U. ..	1	1	—	1
	Brook Street, South Weald ..	"	1	—	2	2
	Harold Wood ..	Hornchurch U. ..	1	—	1	1
	Upminster ..	"	1	—	—	—
Beam ..	Hornchurch ..	"	1	—	1	1
	Romford ..	Romford U. ..	1	—	1	1
Crouch ..	Great Burstead ..	Billericay U. ..	2	2	—	2
	Laindon ..	"	2	2	—	2
Mardyke ..	Bury Farm, Great Warley ..	Hornchurch U. ..	2	2	—	2
	South Ockendon ..	Purfleet U. ..	2	2	—	2
	Orsett ..	Orsett R. ..	4	1	3	4
Kirby Creek	Kirby-le-Soken ..	Frinton & Walton U	1	1	—	1
Holland Brook	Thorpe-le-Soken ..	Tendring R...	1	1	—	1
Cam ..	Newport ..	Saffron Walden R. ..	2	2	—	2
	Saffron Walden ..	Saffron Walden B. ..	1	—	1	1
Roach ..	Rayleigh (East) ..	Rayleigh U...	2	2	—	2
			88	61	30	91
Other samples including private sewage works, rivers, streams, ditches, &c. ..			13	9	9	18
Trade effluents ..			15	11	5	16
Total ..			116	81	44	125

with schemes to secure improvements to these sewage works. The position of the main rivers in the County is as follows :—

Blackwater Catchment Area. Under the Southend Waterworks Act, 1924, the Southend Waterworks Company has power, subject to certain conditions, to abstract water from the River Blackwater at Langford Cut, which is situated below all the six sewage works enumerated in Table VIII on page 41. In respect to the sewage works at Witham, which is nearest to the Company's intake however, the effluent is collected by the Company into a tank from which it is pumped into a valley sewer and discharged into the river below the Company's intake. It is important, therefore, that the effluents from the remaining five sewage works, all of which are comparatively modern works, should be maintained at as high a standard as possible.

The sewage works at Braintree failed to produce a satisfactory effluent during the year. The Urban District Council has therefore been asked to take all possible steps to improve the works.

Roding Catchment Area. The River Roding is not utilised as a source of public water supply. It receives effluents from sixteen sewage works and as it is not fed by any substantial springs its flow in dry weather consists mostly of the discharges from the sewage works. Hence the need for maintaining the sewage works at as high a standard as possible.

For the past few years, the Ongar Sewage Works which were re-modelled in 1926, have proved incapable of maintaining satisfactory effluents. On 9th March, 1934, the Ongar Rural Council therefore instructed a Consulting Engineer to investigate and report upon the question of dealing in a comprehensive manner with the sewage from Chipping Ongar, High Ongar (including Marden Ash), Shelley and Greensted. Application was made to the Ministry of Health for sanction to borrow £32,790 for works of sewerage and sewage disposal for the Parishes of Chipping Ongar, High Ongar, Marden Ash, Shelley, Stanford Rivers and Greensted, the Public Inquiry being held on 1st May, 1935. The scheme makes provision for all the six parishes, for the abolition of the sewage works at Chipping Ongar and High Ongar, and for the establishment of one central sewage works, and it is capable of being extended to deal with three additional parishes, viz., Stondon Massey, Kelvedon Hatch and Navestock. A tender was accepted by the Rural District Council on 10th December, 1935, and the work is in progress. This is an excellent comprehensive scheme which should meet the needs of the area in a satisfactory manner for many years to come.

Lower down the valley a comprehensive scheme at an estimated cost of £103,750 is under consideration by the Chigwell Urban District Council. This aims at concentrating the treatment of the bulk of the sewage at one new central works in the extreme south of the Urban District, securing eventually the abolition of sewage works at Buckhurst Hill, Chigwell, Loughton and

Grange Hill Estate and Station. Endeavours were made to secure an extension of this scheme to make provision for receiving sewage for treatment from the Parish of Theydon Bois in the Epping Rural District, but this proved to be impracticable on financial grounds. The County Council has promised the Chigwell Urban District Council that they will instruct their Officer to support the scheme when the Public Inquiry is held by the Ministry of Health.

Another scheme is also under consideration by the Wanstead and Woodford Urban District Council for providing extensions and improvements at the Wanstead and Woodford (East) Sewage Works to deal with the sewage from this rapidly developing area.

It will be seen that the policy of concentrating the treatment of sewage is now accepted as a general principle in the preparation of sewage schemes. This secures larger works with better treatment facilities, where good results can be obtained consistently, provided experienced and satisfactory labour is engaged. It is false economy to place sewage works which are very expensive, in the hands of cheap, unskilled labour.

Detailed reference was made in last year's Annual Report to the Roding Valley Scheme outlined in Mr. J. D. Watson's report. All the Local Authorities concerned were consulted, but on financial grounds it was found impracticable to take further action. It is, however, being borne in mind with the result that all the schemes referred to above will be capable of being merged into any larger Roding Valley Scheme which may be evolved in the future.

Chelmer Catchment Area. Under the Chelmsford Corporation Water Act, 1923, the Corporation has power, subject to certain conditions, to abstract water from the River Chelmer at Sandford Mill, and the Southend Waterworks Company has similar power under their Act of 1924, to abstract water from that river at Rushes Lock. Both these intakes are situated below all the eight sewage works discharging effluents into the Rivers Chelmer and Wid, enumerated in Table VIII on page 41, with the exception of the Chelmsford Joint Sewage Works. The latter, which is nearest to the intakes, is below the Corporation's intake, but above the Company's intake. The Company has therefore provided a collecting tank and valley sewer through which the sewage effluent gravitates and discharges into the river below the Company's intake at Rushes Lock.

It is important, therefore, that the effluent from the remaining seven sewage works, as well as from the Felstead Beet Sugar Factory, should be maintained at as high a standard as possible.

Seasonal operations of the Felstead Beet Sugar Factory commenced on 23rd September, 1935, and ceased on 15th January, 1936. The discharge from the factory is now mostly an effluent from a small domestic sewage works, and of the five samples obtained during the season only one was found to be unsatisfactory. Temperatures of the river water were taken at the prescribed positions and in every case they readily complied with Section 24 (Heated Fluids) of the Essex County Council Act, 1933.

A comprehensive scheme of sewerage and sewage disposal for the Parishes of Felstead and Little Dunmow has been prepared by the Dunmow Rural District Council. It is estimated to cost £9,250, and makes provision for extending sewers and re-modelling the existing inadequate Felsted Village sewage works to treat the sewage from the Village and Public School and the Felsted Beet Sugar Factory, which is in the parish of Little Dunmow. This will result in the abolition of the Felsted School Sewage Works and the Factory Sewage Works. The Public Inquiry was held on 3rd June, 1936.

The Chelmsford Joint Sewage Works have been re-modelled at an estimated cost of £40,600, to make provision for dealing with a population of 40,000 and a dry weather flow of 1,500,000 gallons. The re-modelled works were brought into full operation on 21st February, 1936.

In respect to the River Ter, the Southend Waterworks Company also has power under their Act of 1924 to abstract water from that river in the Parish of Hatfield Peverel. There are no sewage works above the intake. The Braintree Rural District Council has under consideration a scheme of sewerage and sewage disposal for the Parish of Terling, where the river is being polluted by overflows from septic tanks, &c.

Difficulties have been experienced during the year with the new sewage works at Hatfield Peverel which discharge an effluent below the Company's intake. These were overcome by the end of the year, since when two consecutive satisfactory samples of effluent have been obtained.

Colne Catchment Area. The River Colne is not utilised as a source of public water supply. In the Catchment Area there are five sewage works, two of which (Halstead Urban and Sible Hedingham) discharge effluents direct into the River Colne. Difficulty has been experienced at both these comparatively modern works to maintain a satisfactory effluent. In addition, pollution of the river is taking place at Earls Colne, Castle Hedingham and Great Yeldham, in the Halstead Rural District. The Rural Council has under consideration sewerage and sewage disposal schemes for all these parishes, including improvements and extensions to the Sible Hedingham Sewage Works, at an estimated capital cost of £64,600.

Ingrebourne Valley. The River Ingrebourne, which is a tributary of the River Thames, is a small stream and it is not utilised as a source of public water supply. The upper part drains a rural area lying west of Brentwood. Lower down it receives the drainage of Brentwood and parts of Hornchurch. At present there are four sewage works in the valley, namely, Brentwood, South Weald, Harold Wood and Upminster.

Extensive improvements and additions have been carried out at the Brentwood Sewage Works, with the result that only a small quantity of sewage is now dealt with at the South Weald Works.

The Joint Works of Sewerage and Sewage Disposal in the Urban Districts of Hornchurch and Romford at an estimated cost of £153,500, is nearing

completion. The scheme makes provision for the abolition of the inadequate sewage works for Harold Wood and Upminster, and for the treatment of all sewage for the Hornchurch Urban District at the enlarged Romford Joint Sewage Works in the Beam Valley. When completed, therefore, the sewage works in the Ingrebourne Valley will be reduced from four to two.

Rom or Beam Valley. This small river is a tributary of the River Thames and it is not utilised as a source of public water supply. It arises in a rural part in the south of Ongar, and does not drain any substantial development except the town of Romford and part of Hornchurch.

At the present time there are two sewage works in the Valley, namely, Romford and Hornchurch. Under the Joint Scheme referred to in the report on the Ingrebourne Valley, which is nearing completion, the Hornchurch Sewage Works will be abolished and all sewage will be treated at the enlarged Romford Joint Works.

Crouch Valley. The non-tidal portion of this river is small and it is not utilised as a source of public water supply. There are two sewage works in this portion of the valley, viz., Great Burstead and Laindon. The latter was opened during the year and meets a long-felt need for the populous part of Laindon and parts of Lee Chapel and Little Burstead. The cost of the scheme, which took two and a half years to complete, was £29,000. Samples of effluent from both these works were satisfactory.

The Mardyke. This watercourse drains a rural area of low-lying flat land between Brentwood and the Thames, into which it flows west of Purfleet. It is not utilised as a source of public water supply. There are three sewage works in the area, viz., Hornchurch (Bury Farm), Purfleet (South Ockendon) and Orsett. Satisfactory effluents have been obtained except from the small works at Orsett, where difficulties have arisen which are receiving attention.

The Stour Valley. Under the South Essex Waterworks Acts, 1928 and 1935, the South Essex Waterworks Company has power, subject to certain conditions, to abstract water from the River Stour at Langham in the Lexden and Winstree Rural District. On the Essex side there are no sewage works discharging effluents into the river above the Company's intake.

MILK SUPPLY.

General.

The year 1935 may be described as a progressive year so far as milk is concerned, much attention having been given to the nutritive value of milk, to the need for obtaining a cleaner and safer milk supply and to the desirability in the interests of public health of securing an increased consumption of liquid milk.

A memorandum on "The Nutritive Value of Milk" was published in March, 1936, by the Ministry of Health, which is regarded as "an important contribution to a subject which is of great public interest." This memorandum points out that much experimental evidence in recent years has shown that cow's milk is the most valuable food known for the promotion of growth and health in children.

In respect to a cleaner and safer milk, reference is made elsewhere in this report to the Accredited Milk Producers' Scheme and to the excellent work carried out by the Chief Veterinary Officer and his staff in the inspection of dairy herds, all of which have resulted in raising the standard of milk production in this County. The milk now produced is generally speaking safer and cleaner than ever before. Nevertheless, there is much more to be done before all milk sold for human consumption can be regarded as safe. As stated in the above-mentioned Memorandum, "The ideal is milk from perfectly healthy cows, but herds in which all the cows are perfectly healthy are at present relatively few. Where such milk is not available the milk should be pasteurised or boiled before use."

The Advisory Committee has also studied the effects of heat on the nutritive value of milk and the "few human experiments that have been done have not shown that heat significantly lowers the food value of milk for man."

The problem of what to do with surplus milk has been exercising the minds of the Milk Marketing Board and others for some time. Large quantities of milk have to be disposed of at low prices for manufacturing purposes. On the other hand, the health of the nation is suffering from the lack of this valuable food. It is to be hoped that some scheme will be devised whereby this so-called surplus milk could be made available at a price less than the ruling retail price to the many families who, through lack of means, are unable to purchase even the existing average quantity of 0.4 pint of milk per head per day.

County Councillor Pash is to be congratulated upon the trouble which he has taken to promote and carry through the meeting of the Essex County Council on 19th May, 1936, the following recommendations of the Public Health and Housing Committee :—

"That the Ministry of Health, Ministry of Agriculture, Milk Marketing Board and County Councils Association, be informed that in the opinion of the County Council—

1. The national physique would be greatly improved by the increased consumption of milk of suitable quality.
2. This increased consumption could be effected by a reduction in price, and be assisted by revised methods of organisation and distribution.
3. The disparity between the total quantity of milk sold for manufacturing purposes and ordinary use should be investigated by an impartial authority and as far as practicable remedied."

Veterinary Inspection of Dairy Herds.

As stated in the last Annual Report, a Scheme for the inspection of dairy herds in the Administrative County three times yearly was commenced by Mr. F. W. Medlock, M.R.C.V.S., Chief Veterinary Officer, on 1st October, 1934. His original staff consisted of 19 part-time District Veterinary Officers, but as and from 1st October 1935, nine of those part-time officers were replaced by one Senior Assistant Veterinary Officer and two Assistant Veterinary Officers. This necessitated alterations of the areas served by each officer.

The following information has been extracted from Mr. Medlock's report for the period 1st October, 1934, to 31st December, 1935 :—

“ On the 31st January, 1935, the conclusion of the first examination, it was found that 2,067 cowkeepers, whose herds comprised 45,245 cows, of which 36,209 were in milk, were producing milk for human consumption.

“ Under the Milk and Dairies Order, 1926, it is unlawful for the owner of cows suffering from certain specified diseased conditions to sell milk from such cows or to use it in the manufacture of products for human consumption. These diseased conditions are non-tubercular and are not notifiable, and it can be confidently asserted that none of these conditions would have come to light or to the knowledge of the County Council were it not for the periodical visits to farms by the veterinary staff.

“ These diseased conditions, and the number of cows found to be suffering therefrom during the period under review are tabulated below :—

	Quarters ended—				
	31st Dec., 1934.	31st Mar., 1935.	30th June, 1935.	30th Sept., 1935.	31st Dec., 1935.
‘ Acute inflammation of the udder	13	9	20	12	10
‘ Acute Mastitis	133	70	72	120	114
‘ Actinomycosis of udder ..	—	—	—	2	—
‘ Anthrax	—	—	—	—	—
‘ Suppuration of the udder	17	26	45	27	16
‘ Foot-and-Mouth Disease	—	—	—	—	—
‘ Comatose condition ..	—	—	—	—	1
‘ Septic condition of uterus	26	16	17	10	26
‘ Any infection of the udder or teats which may convey disease	193	202	188	174	70
	382	323	342	345	237

“ Whenever an animal is found to be suffering from any of these diseased conditions, a notice is served upon the owner, drawing his attention to the fact, and the local Medical Officer of Health is also notified.”

In addition to the above, 586 animals were detected during routine inspection of the dairy herds during the period 1st October, 1934, to 31st December, 1935, and were dealt with under the Tuberculosis Order, 1925.

Milk and Dairies (Consolidation) Act, 1915.

BIOLOGICAL EXAMINATIONS. For the financial year 1935-6, the Public Health and Housing Committee and the Education Committee authorised the taking of the following samples of milk for submission to biological examination :—

1,750 to be obtained by the District Veterinary Officers.

600 to be obtained by the Weights and Measures Inspectors and the County Health Inspectors.

600 under the Milk-in-Schools Scheme to be obtained by the Weights and Measures Inspectors.

2,950

This is the largest number of samples for which provision has been made.

During the year 1935, the following samples were obtained mostly direct from farms and submitted to biological examination with the results indicated :—

By whom taken.	No.	No. found to contain tubercle bacilli.
Weights and Measures Inspectors and County Health Inspectors	.. 549	.. 31 (5.6%)
District Veterinary Officers	.. 600	.. 23 (3.8%)
Total	.. 1,149	.. 54 (4.7%)

This is the lowest percentage ever recorded and compares favourably with the percentage for 1934, which was 12.3.

The Chief Veterinary Officer arranged for the usual investigations under the Milk and Dairies (Consolidation) Act, 1915, and took all necessary action under the Tuberculosis Order, 1925, in regard to the samples in which tubercle bacilli were found.

SECTION 4. During the year, 32 notifications were received from Medical Officers of Health under Section 4 of the Milk and Dairies (Consolidation) Act, 1915, to the effect that the biological examination of samples of milk from 33 farms within the Administrative County of Essex had revealed the presence of tubercle bacilli. Particulars were transmitted to the Chief Veterinary Officer, who arranged for the usual examinations of the herds at the farms where the milk in question was produced with the following results :—

Animals were dealt with under the Tuberculosis Order, 1925, in	17 cases
Animals had been sold from the herd between the date of sampling and the date of the Veterinary Officer's visit in	.. 2 ..
Impossible to trace the cause of infection in	.. 5 ..
Investigations still proceeding at the end of the year in	.. 8 ..

Some difficulty has been experienced by the Chief Veterinary Officer during the year in tracing some of the cows from which tubercle bacilli were being excreted in the milk, particularly in those cases where samples of mixed milk had been obtained on milk-rounds. It is realised that the authority to take samples under Section 4 of the Milk and Dairies (Consolidation) Act, 1915, refers to "samples of milk at any time before it is delivered to the consumer." Further, that the results of the examination of samples of mixed milk give an indication of what is being supplied for human consumption. But this method of sampling is not of much assistance

the County Council in tracing the affected cow or cows, as the mixed milk is at times from five or more farms. This involves special visits by Veterinary Surgeons to all the farms concerned, resulting in examinations of cows and prolonged examinations of bulk, group and individual samples of milk at great expense to the County Council. It would be helpful, therefore, if Officers of Local Sanitary Authorities would bear this in mind in future and endeavour to obtain samples direct from farms. Even taking samples direct from churns on arrival at Central Dairies is not reliable, as churns are liable to be tampered with en route by unauthorised persons, or milk may have been added to them from a farm other than the one referred to on the label.

As stated elsewhere, the County Council authorised the taking of 2,950 samples of milk for biological examination during the year. At least one sample per year is now taken from each farm, totalling 1,980, leaving the remainder for two samples from some of the farms and for samples of milk delivered but not produced in the County.

Milk and Dairies Order, 1926.

The local Sanitary Inspectors in seven Urban Districts and five Rural Districts took advantage of the County Council's laboratory facilities by submitting 222 samples of milk to the Coliform Bacillus test. Coliform bacilli were not present in 1/1000th of a cubic centimetre in any of these samples. This is a working standard which is easily attainable in the production of ordinary raw milk.

As and from 1st April, 1936, the Laboratory Service has been extended so as to include the bacteria count as well as the coliform bacteria test.

Milk (Special Designations) Order, 1923.

The following licences to produce graded milks were in operation during the year 1935 :—

Kind.	No.	Granted by.
Certified Milk	8	Ministry of Health.
Grade A (Tuberculin Tested) Milk ..	30	Ministry of Health.
Grade A Milk	596	County Council.
Total	634	

GRADE A MILK. 1,508 visits were paid to farms licensed to produce Grade A Milk, where 780 samples were obtained. This is the greatest number of samples taken, due to the Milk Marketing Board's Roll of Accredited Milk Producers (see page 50), which necessitated the appointment of a second Assistant County Health Inspector, who took up duty in July, 1935.

As and from 1st October, 1935, arrangements were made with the Chief Veterinary Officer for the taking of samples of milk by the District Veterinary Officers at their quarterly visits to licensed farms with a view to ensuring that the milk produced was of the standard required by the Milk (Special Designations) Order, 1923. Up to 31st December, 1936, the District Veterinary Officers obtained 322 samples of milk for submission to the bacteria count and coliform bacteria test. Two of these samples did not comply with the required

standard owing to the fact that they contained more than 200,000 bacteria per cubic centimetre, and 20 did not comply owing to the presence of the coliform bacillus in 1/100th of a cubic centimetre.

Roll of Accredited Milk Producers.

The Milk Marketing Board inaugurated its Roll of Accredited Milk Producers on 1st May, 1935. They contended that "its purpose is to raise the standard of milk 'production throughout the country.'" On securing admission to that Roll, farmers "are entitled to a bonus of 1d. per gallon on all legally graded milk sold by them 'through the Board.'" To secure admission to that Roll a farmer must possess a licence to produce Grade A Milk issued by the County Council under the Milk (Special Designations) Order, 1923, under which the County Council has to be satisfied with the "arrangements for the production, storage, treatment and distribution of the 'milk.'"

For the guidance of the farmers, the following notes were published in the "Essex Farmers' Journal" as an indication of what had to be done in order to secure a licence to produce Grade A Milk :—

- (1) Application should be made to the Clerk of the County Council, County Hall, Chelmsford.
- (2) Milk and Dairies Order, 1926, must be complied with to the satisfaction of the Local Sanitary Authority. Farmers should consult the local Medical Officer of Health or Sanitary Inspector.
- (3) Milk (Special Designations) Order, 1923, must be complied with to the satisfaction of the Essex County Council. Particulars of conditions are furnished by the Clerk of the County Council with every application form.

Information regarding the necessary veterinary inspection of the dairy herds concerned is given on page 22 of the "Essex Farmers' Journal" for March, 1935. Advice thereon can be obtained from the Chief Veterinary Officer, Bank Chambers, Chelmsford.

- (4) To qualify for this Scheme, it is essential that—

- (a) Milk vessels are sterilised by steam ;
- (b) Water supply is suitable and sufficient ;
- (c) Milking pails are of the semi-covered type.
- (d) Overalls, including coat, divided apron and cap, are provided for and worn by, milkers and dairy workers ;
- (e) Washing facilities, including water, soap, nailbrush and roller towels, are provided.
- (f) Tails, udders and flanks of cows are clipped.
- (g) First stream of milk from each teat is rejected.
- (h) Floor of cowshed is maintained in as clean a state as possible.
- (i) Manure is stored at a reasonable distance from cowshed and dairy.

General : The above information is given as a guide to farmers, but it does not necessarily include all matters which may require attention at every farm.

An inspection of every farm for which a licence is required will be made by a member of the staff of the County Medical Officer's Department, who will be prepared to give any necessary advice.

Advice on modern methods of milk production can be obtained from the East Anglian Institute of Agriculture, Chelmsford, or from the local Medical Officer of Health or Sanitary Inspector.

Every effort has been made to encourage farmers to raise the standard of milk production in accordance with the above-mentioned Scheme, and by the middle of May, 1935, no less than 288 applications had been received. This quick response severely taxed the resources of the Public Health Department, the staff of which had to be strengthened. Helpful assistance and co-operation, however, in the necessary inspectorial work were readily provided by the local Sanitary Inspectors and by the staff of the East Anglian Institute of Agriculture. The chief difficulties arose in connection with the sterilisation of milk utensils, and the water supplies of the farms.

In respect to sterilisation, a producer with less than fifteen cows in milk is allowed, by request, to use an ordinary copper with a hole in the lid through which steam can be passed into an inverted box in which the equipment can be placed for sterilisation. One producer with a large copper, in which he boils each utensil, has been allowed, by request, to use this for sterilising purposes. Little difficulty has been experienced in this connection with applicants for licences, most of the farmers having appreciated the need for establishing a foolproof system of sterilisation of utensils, namely, by steam under pressure.

With regard to water supplies, the Milk and Dairies Order, 1926, requires the provision of "a supply of water suitable and sufficient for the requirements of this Order." In practice, it is found that there are isolated farms where there is not available a supply of water from a satisfactory source. In these cases, every possible step is taken to secure the necessary protection of the source of the supply, and the farmer is asked to give a written undertaking that if and when a better supply of water becomes available within a reasonable distance, he will obtain it.

In connection with the remainder of the points included in the above-mentioned "notes," little or no difficulty was experienced, but from information received, it did appear that there was need for uniformity of action throughout England and Wales.

By Memorandum, dated 22nd January, 1936, the County Councils' Association referred to the considerable dissatisfaction which had been caused by this lack of uniformity and issued notes for the information of County Councils, as they considered that "ultimate uniformity must be aimed at if all farmers are to receive that equality of treatment to which undoubtedly they are entitled."

On 31st December, 1935, no less than 596 farms in the Administrative County of Essex had been licensed to produce Grade A Milk.

Milk-in-Schools Scheme, or Scheme for the Supply of Milk in Schools.

This Scheme was outlined on page 45 of the Annual Report for 1934. The Scheme was readily accepted by, and received the full co-operation of most of the Head Teachers, upon whose willing help the success of the Scheme must depend. As a result of these efforts under the Milk Marketing Board Scheme, the following numbers were participating on 31st March, 1936 :—

Number of Schools ..	..	..	476
Number of Children ..	..	..	37,367

Outside the Scheme.

Number of Schools ..	..	..	120
Number of Children ..	..	..	5,463

The County Medical Officer, after consulting the local Medical Officers of Health, issued during the year 444 certificates approving of the source and quality of the milk supplied. On 31st December, 1935, there were 502 certificates in operation under the scheme.

During the period 5th November, 1935, to 27th February, 1936, samples of milk as delivered to the schools were obtained and submitted to biological examination and the bacteria count and coliform bacteria test, with the following results :—

- (a) *Biological Examination.* 479 samples, of which 11 gave inconclusive results and 26 (5.5 per cent.) were found to contain tubercle bacilli. In respect of the last mentioned samples, prompt action was taken by the Chief Veterinary Officer with a view to eliminating from the herds concerned any cow which was found to be giving tubercle bacilli in the milk.
- (b) *Bacteria Count and Coliform Bacteria Test.* The standard adopted for ordinary raw milk is that which applies to Grade A milk, namely, the number of bacteria must not be more than 200,000 per cubic centimetre and coliform bacillus must be absent in 1/100th of a cubic centimetre. Of the 468 samples examined, 6.6 per cent. did not comply with the adopted standard in respect to the number of bacteria and 8.1 per cent. in respect to the coliform bacillus. In each of the unsatisfactory cases representations were made to the local Medical Officer of Health and in some instances advisory visits by members of the staff of the County Health Department were made to the farms concerned.

In regard to those schools not participating, enquiries show that in the majority of the cases some other form of drink, such as cocoa, malted milk, &c., is provided.

WATER SUPPLIES.

During the year four Rural Districts made application to the Ministry of Health for sanction to borrow sums of money (gross total £226,284) for works of water supplies and in consequence, Public Inquiries were held on the dates shown below :—

Date of Inquiry. 1935.	Local Sanitary Authority.			Loan required. £
February 22nd	..	Maldon R.	..	40,000
May 8th	..	Saffron Walden R.	..	8,700
July 2nd..	..	Dunmow R.	..	74,000
August 7th	..	Chelmsford R.	..	65,584
October 31st	..	Braintree R.	..	38,000
				£226,284

The rainfall in inches as recorded by the County Meteorological Station at Chelmsford for the year 1935 is compared below with the figures for the three previous years :—

Month.	Rainfall in inches.							
	1935.		1934.		1933.		1932.	
January	..	1.78	..	1.36	..	1.21	..	1.15
February	..	2.13	..	0.19	..	1.14	..	0.23
March	..	0.76	..	2.06	..	1.64	..	1.10
April	..	2.66	..	2.04	..	0.76	..	1.96
May	..	1.18	..	0.51	..	1.42	..	3.69
June	..	3.49	..	1.35	..	1.09	..	0.60
July	..	1.10	..	1.86	..	0.93	..	2.14
August	..	1.79	..	1.46	..	0.37	..	1.09
September	..	3.14	..	0.95	..	1.85	..	1.77
October	..	2.70	..	1.41	..	1.53	..	4.90
November	..	4.29	..	1.52	..	1.15	..	1.12
December	..	2.30	..	3.96	..	0.55	..	0.33
Totals	..	27.32	..	18.67	..	13.64	..	20.08

For the ten years 1926-1935 the average rainfall was 22.28 inches at Chelmsford.

It will be seen that at Chelmsford 8.65 inches more rain fell in 1935 than in 1934. November was the wettest month of the year, rain falling on 24 days, producing 4.29 inches of rain, whereas in the same month in 1934 the rainfall was only 1.12 inches. Despite the increased rainfall, there was still an acute shortage of water in some of the Rural Districts, and water was being carted in some areas at the end of the year.

With two exceptions, all the Rural District Councils have now dealt comprehensively with their districts. The aim has been to provide at least the nucleus of a piped water supply in every parish, which will be capable of extension to outlying parts when financial and other circumstances permit. When all the schemes are completed there will be very few parishes without a public piped supply. It will be seen from the Table on page 54 that the estimated cost of all the schemes of public water supplies for the Rural Districts is £693,237.

To encourage and assist Rural District Councils in the provision of this vital necessity, the Minister of Health obtained power under the Rural Water Supplies Act, 1934, to make contributions towards expenditure incurred by Local Authorities in providing or improving supplies of water in rural localities. For the purpose, the

Minister set aside the sum of one million pounds. From the information available at the time of writing, the Minister has already promised over £50,000 to Rural District Councils in Essex on the understanding that an equivalent grant will be made by the County Council. This means that with an equivalent grant from the County Council, over £100,000 may be granted to the Rural District Councils to help in this important work. The following table shows the present position in each Rural District :—

Table showing estimated cost of Schemes of public water supplies and the amount of grant promised by the Ministry of Health.

Rural District.	Estimated cost. £	Amount of grant from Ministry of Health. £
Braintree R. (Northern Area)	38,000	6,000
„ (South Eastern Area)	37,360	Not yet fixed
Chelmsford R. (Southern Area)	43,800	None.
„ (Northern Area)	65,584	12,000
Dunmow R. (Main Scheme)	74,000	12,000
„ (Smaller Scheme)	10,340	1,300
Epping R.	6,126	350
Halstead R. (Main Scheme)	134,000	Not yet fixed.
„ (Smaller Schemes)	4,325	550
Lexden & Winstree R.	80,700	None.
Maldon R. (Northern Area)	17,250	None.
„ (Southern Area)	39,950	4,200
Ongar R.	13,571	2,400
Orsett R.	4,600	900
Saffron Walden R.	121,050	10,800
Tendring R.	2,581	150
	£693,237	Total already promised £50,650

SOUTH ESSEX WATERWORKS COMPANY. During the year this Company applied for and obtained Parliamentary powers with a view to augmenting their sources of supply. The demand for water in this Company's limits of supply has greatly increased since the previous powers were obtained in 1928 to abstract water from the River Stour at Langham Mill in the Lexden & Winstree Rural District. The demand continues to increase rapidly; therefore the Company felt it expedient to make provision for meeting this increasing demand.

The need for this extra provision was foreshadowed by Mr. J. Mackworth Wood, M.Inst.C.E., in his report on the Water Supplies in Rural Districts, dated 20th September, 1934. In that report special reference is made to the conference with Water Companies in Essex which was held on 19th July, 1934, prior to which each Waterworks Company had been informed that at the conference consideration would be given to the following points :—

- (1) Whether, in view of the ever-increasing population, the existing sources of supplies are sufficient to meet present and immediate needs.
- (2) Whether the Companies are contemplating acquiring new sources of supplies or augmenting existing schemes of supplies.
- (3) What immediate action can be taken to assist those parishes inside or outside the Companies' statutory areas where there is a shortage of water.

At the interview with the South Essex Waterworks Company, the Chairman of that Company agreed with Mr. Mackworth Wood's suggestions that "it was an absolute necessity for his Company to have a large storage reservoir or reservoirs between Langham and Tiptree. They would go to Parliament in the coming Session of Parliament, 1935, to obtain the necessary powers, and he hoped the County would assist, and not oppose them. Personally, without pledging the Council, I said I would support any such storage scheme, as I was certain it was an absolute necessity."

By the South Essex Waterworks Act, 1935, the Company has obtained power to impound and abstract the waters of the River Stour and the Layer Brook in order to supplement the supplies of their existing undertaking which was established under the Company's Act of 1928. The Act also enables the Company to construct an aqueduct from the point of intake (Langham Mill) to a reservoir to be constructed in the parish of Ardleigh and another reservoir (to be a storage reservoir and to be called the Abberton Reservoir) to be formed by means of a dam across the Layer Brook, with an aqueduct therefrom and terminating at the Company's existing mains in the parish of Tiptree, together with the necessary pumping stations. The main object of these provisions is to collect and store flood water from the River Stour.

By the same Act, the Company obtained sanction and confirmation to the construction of the four boreholes and the pumping machinery, &c., constructed at their existing works in the parishes of Boxted and Langham.

The County Council and other interested parties secured certain protective measures, and the County Council were also successful in obtaining increased facilities for the supply of water in bulk to Local Sanitary Authorities in the Administrative County of Essex. These facilities have already been of great service to the Chelmsford and Maldon Rural Districts, and they will be of assistance to other Rural Districts, and probably Urban Districts in the future.

ESSEX COUNTY COUNCIL ACT, 1933.

Establishments for Massage and Special Treatment.

On 1st April, 1934, Sections 54-71 of the Essex County Council Act, 1933, regarding establishments for massage and special treatment came into force by resolution of the County Council, in the Boroughs of Chelmsford, Colchester, Maldon and Saffron Walden, the Urban Districts of Brentwood, Chigwell, Chingford, Clacton, Dagenham, Epping, Grays, Hornchurch, Purfleet, Romford, Tilbury and Waltham Holy Cross, and the Rural Districts of Epping, Ongar and Orsett.

On 1st August, 1934, the Sections also came into force by resolution of the County Council, in the Urban Districts of Billericay, Frinton and Walton and Wanstead and Woodford.

By Section 69, the powers and duties under this part of the Act are delegated to the Boroughs of Barking, Ilford, Leyton and Walthamstow. Conditions and restrictions to be imposed upon the exercise of the powers and duties of Part IV of the Essex County Council Act, 1933, were approved by the County Council on 6th March, 1934.

During the year under review, licences were granted to 24 applicants, authorising them to carry on establishments for massage or special treatment on the premises approved.

Refuse Dumps.

Sections 146-157 of the Essex County Council Act, 1933, in conjunction with the Third Schedule, give power for controlling the depositing of refuse in any place within the County other than the place within the County district in which the refuse is collected or assembled. In other words, it is mainly to control the dumping in Essex of refuse which has been collected in many of the London Boroughs.

At the end of the year there were 12 refuse dumps in Essex which must comply with the conditions of this Act. Surprise visits are paid to these dumps from time to time, and apart from a few minor infringements, it is apparent that every effort is being made to comply with the provisions of the Act.

Under Section 146 (3), the County Council, with the consent of the Local Authority, may prescribe areas in the County where dumping on a large scale may take place in accordance with Part II. of the Third Schedule. During the year one area in the southern portion of the Billericay Urban District and one area at the western end of the Canvey Island Urban District were prescribed in accordance with this sub-section.

Under Section 146 (2), with the previous consent in writing of the Council and of the Local Authority, any authority, body or person may form a deposit of refuse, or continue to add refuse to an existing deposit, subject to compliance with the conditions in Part II. of the Third Schedule. During the year consent was given to dumping under this Section in one area in the Borough of Leyton.

TOWN AND COUNTRY PLANNING.

The administration of the Town and Country Planning Act, 1932, and matters relating to Playing Fields and Open Spaces are undertaken by the Town and Country Planning Committee, which during the year dealt with many matters, including the following :—

TOWN PLANNING SCHEMES. The County Council entered into an agreement with the Urban District Council of Waltham Holy Cross for the constitution of a Joint Planning Committee, pursuant to the provisions of Section 3 of the Town and Country Planning Act, 1932.

Draft Town Planning Schemes from the following areas were considered, and representations and objections were put forward by the County Council in each case :—

Epping Rural, Grays Thurrock Urban, Orsett Rural and the West Mersea section of the North-East Regional Planning Committee.

The whole of the County, with the exception of the Borough of Leyton, is now covered by Executive Schemes which are in course of preparation or in operation.

"GREEN BELT" PROPOSALS. On 22nd January, 1935, the London County Council re-convened a Conference of representatives of County Councils and County Borough Councils interested in the "Green Belt" proposals of the Greater London Regional Planning Committee. The object of the proposals is to provide a reserve supply of public open spaces and recreational areas and to establish a green belt or girdle of open space lands, not necessarily continuous, but as readily accessible from the completely urbanised area of London as practicable. It was emphasised that the problem was urgent as the suitable land is daily being encroached upon and built up. At that Conference the London County Council made an offer of grants which would be open for a period of three years, and which would be limited to a total commitment in that period of £2,000,000. Such grants would be available for the County Councils of Buckinghamshire, Essex, Hertford, Kent, Middlesex and Surrey, and the County Boroughs of Croydon, East and West Ham, towards the approved cost of acquiring or, where legally possible, sterilising approved lands for recreational purposes or for inclusion in the green belt.

The Town and Country Planning Committee has given much time and thought to these proposals which have such an excellent object in view. All the areas in Essex surrounding London have been surveyed, but before submitting concrete proposals to the County Council it was felt desirable to secure approval (which was obtained on 7th April, 1936), of the following recommendations :—

That, subject to a satisfactory arrangement being reached with the London County Council as to the terms upon which their promised contributions are to be made, the Council approve in principle the spending, over a period of three years, from 1st April, 1936, of a sum not exceeding £252,000 in acquiring or sterilising, or making grants towards the acquisition or sterilisation by other local authorities of land situate in that part of Essex which lies within the London Traffic Area, in furtherance and within the general framework of the Scheme for securing a Green Belt round London, outlined by the Greater London Regional Planning Committee in 1928, and again brought forward in a modified form by the London County Council in January, 1935.

OPEN SPACES.

(a) *Waltham Abbey.* A contribution of 20 per cent. was approved during the year by the County Council towards the cost of the acquisition by

the Waltham Holy Cross Urban District Council of such portion of the Abbey Gardens, Waltham Abbey, as is purchased for the purpose of a public open space under the Open Spaces Act, 1906.

(b) *Chingford*. A contribution of 20 per cent. was approved by the County Council towards the cost of the acquisition by the Chingford Urban District Council for the purposes of open spaces of 10 acres of land at Mansfield Park and 39 acres at Larkswood.

LANDS FOR PRESERVING AMENITIES AND VIEWS. Pursuant to their powers under the Essex County Council Act, 1933, the County Council approved of the purchase of the following :—

Approximately 151 acres of land adjoining the existing open space at One Tree Hill, Corringham.

Approximately 160 acres of land forming the property known as Northlands Estate, and approximately 26 acres adjoining that Estate.

Approximately 11 acres of land forming the property known as Bell Hill Wood, Vange.

Approximately 96½ acres of land forming the property known as Vange Hall, and approximately 32 acres of land adjoining, in separate ownership.

These open spaces are delightfully situated and are becoming increasingly popular resorts of the general public. A toposcope has been erected on the summit of One Tree Hill as a Jubilee Memorial.

PLAYING FIELDS. Approval was given to the contributions to the Local Sanitary Authorities set out below towards the cost of the acquisition of playing fields, subject in each case to facilities being granted to the satisfaction of the Education Committee for the use of the grounds by children of neighbouring elementary schools for play and organised games :—

(a) *Chingford Urban*.

10 per cent. for 64 acres on six sites.

(b) *Rochford Rural*.

25 per cent. for 10 acres forming part of Townfield Farm, Hawkwell.

25 per cent. for 12 acres on north side of Hawkwell Drive, Hawkwell.

(c) *Wivenhoe Urban*.

25 per cent. for 16½ acres forming part of Glebe Farm.

(d) *Grays Thurrock Urban*.

25 per cent. for 2½ acres in Parker Road, Grays.

(e) *Frinton and Walton Urban.*

25 per cent. for 13.44 acres on north-west side of Walton Road, Frinton.

(f) *Dunmow Rural.*

£250 towards cost of 24½ acres adjoining Foakes Memorial Hall, Dunmow.

FOOD AND DRUGS.

The Administrative County is now divided into two districts for the sampling of Food and Drugs, namely, Eastern and Western Districts. The following statistical information relating to this work has been kindly furnished by the County Analyst, Dr. Bernard Dyer, 17, Great Tower Street, London, E.C. (Telephone No. Royal 6608), and relates to the year 1st December, 1934, to 30th November, 1935 :—

Samples taken from Vendors.	Samples Analysed.	Samples Unsatisfactory.	Percentage of Unsatisfactory Samples.
Eastern District of the County ..	1491 ..	88 ..	5.9 (5.8)
Western District of the County ..	2491 ..	47 ..	1.9 (1.3)
Chingford Urban District Council ..	13	1 ..	0.8 (0.8)
Borough of Walthamstow ..	73		
Wanstead and Woodford Urban District Council ..	40		
	4108 ..	136 ..	3.3 (2.8)
“ Appeal to Cow ” milk samples :—			
Eastern District of the County ..	52		
Western District of the County ..	15		
	4175		
Milk Samples taken from Schools or other Institutions :—			
Eastern District of the County ..	126 ..	7 ..	5.6
Western District of the County ..	147 ..	3 ..	2.0
Walthamstow Borough ..	5 ..	— ..	—
	4453 ..	146 ..	

The above table shows that during 1935 the number of unsatisfactory samples examined increased, the percentage being 3.3 per cent. compared with 2.8 per cent. in 1934.

The following are interesting extracts from the Annual Report of Dr. Bernard Dyer, the County Analyst :—

“ MILK. The samples taken from vendors were 1,188 in number, of which 77 were adulterated or unsatisfactory, in 27 cases through the addition

of water in proportions varying from 2 to 23 per cent., and in 50 cases by reason of deficiency in fat ranging from 3 per cent. to 55 per cent. of the minimum quantity expected in normal milk as indicated in the regulations.

In addition to the samples taken from vendors, 278 samples of milk were taken from milk supplied to schools or other public institutions, and of these one contained 8 per cent. of added water, while 9 other samples were deficient in fat having regard to the Sale of Milk Regulations, the deficiencies varying from 3 per cent. to 13 per cent. of the normal quantity proper to natural milk. During the year as many as 67 samples were taken as "appeal to cow" samples in connection with purchased milk found to be unsatisfactory.

SAUSAGES. Seven samples of sausages containing sulphur dioxide were sold without any declaration to the purchaser of the fact that they had been "preserved." In six of these cases the sulphur dioxide was not in excess of the maximum quantity permissible when due notice of preservation is given, but in one case the quantity was something approaching to five times the highest permissible quantity of preservative.

PEARL BARLEY. Twenty-one samples were found to be "faced" with talc or steatite, an objectionable practice sometimes carried out (mainly, we believe, abroad) for improving the appearance of this article.

GINGER. A sample of ground ginger was found to be heavily preserved with sulphur dioxide in contravention of the regulations of the Minister of Health relating to preservatives.

SUGAR. Of 35 samples of dark West Indian Pudding Sugar, two were found to contain quartz sand to the respective extent of 2.8 per cent. and 2.9 per cent.

VINEGAR. Fourteen samples of vinegar were deficient in strength in quantities varying from 5 per cent. to 41 per cent. of the minimum quantity of acetic acid required in vinegar; while three other samples were unsatisfactory by reason of the fact that although of full strength they did not consist of "malt vinegar" under which name they were supplied to the purchaser."

MENTAL DEFICIENCY.

Arrangements for ascertainment examinations and medical reports on cases suspected of mental defect have remained as in previous years. The services of the Deputy County Medical Officer, Dr. T. P. Puddicombe, for examination and recommendation in regard to these cases, have continued to be available to the Statutory Committee for the Care of the Mentally Defective and the Courts of Justice.

During the year 361 persons have been examined and reports submitted. The classification of the persons examined are as follows :—

	Males.	Females.	Total.
Feeb'e-minded	123	93	216(a)
Imbeciles	49	40	89(b)
Idiots	22	11	33(c)
Moral Defectives	1	—	1
Not certified under the Act ..	15	7	22(d)
	210	151	361

The above includes under (a) males 28, females 2 ; (d) males 5, females 3, referred for examination by the Justices.

(a) Nine also suffer from epilepsy and one is a post encephalitic.

(b) Three are epileptics.

(c) Seven are epileptics and one a cretin.

The Essex Voluntary Association has again rendered invaluable service by preliminary enquiries in ascertainment and voluntary and statutory supervision. This Association continues to organise and supervise the occupation centres which have carried out most helpful work and are four in number, viz. :—

Barking	.. Central Hall, opposite Town Hall.
Dagenham	.. Osborne Hall, Osborne Square (replacing the Centre previously held at Goodmayes).
Walthamstow	.. The Settlement, Greenleaf Road.
„	.. Boys' Handicraft Class, St. Stephen's Hall, Grove End Road.

The main feature in progress during the year has been the opening of the Turner Village, an extension to the Royal Eastern Counties Institution, Colchester, on the 18th July, 1935, by His Royal Highness The Duke of Kent. This additional and much needed accommodation, which had been under consideration for several years, but unfortunately delayed by various difficulties, is now an accomplished fact, and greatly relieves the pressure on beds for these mentally afflicted persons.

The original scheme provided for twenty-one villas, each to accommodate 52 patients, with the necessary ancillary buildings.

The portion now built comprises eight villas for male patients, together with an assembly hall, kitchen and domestic staff blocks, laundry, power house, male staff block, lodges and an appropriate portion of the administrative block and workshops.

These have been built on a pleasantly elevated site and sports and recreation grounds are provided, whilst the Joint Committee and Dr. Douglas Turner, Medical Superintendent, are to be congratulated on this excellent additional accommodation. There are ample reasons for suggesting that further extensions should be made without undue delay. It is true that the long waiting list of the past few years has been practically cleared, but the relief of the Public Assistance Institutions by removal of the Mentally Defective still awaits solution.

It is perhaps not inappropriate to consider here the general action taken in regard to ascertainment and control of defectives.

ASCERTAINMENT. Under the Education Act, 1921, and the Mental Deficiency Act, 1913, as amended by the Mental Deficiency Act, 1927, and the Regulations of the Board of Education, the Education Authority is responsible for :—

- (1) Ascertainment of defectives between the ages of 7 and 16 years.
- (2) Provision of suitable education of those defectives who are educable.
- (3) Notification to the Statutory Committee for the care of mentally defective children certified as :—

- (a) Ineducable.
- (b) Unsuitable for further education in a special school.
- (c) Leaving a special school and in need of further care and control by means of Institutional care, guardianship, or supervision.

It will thus be seen that ascertainment and notification to the Statutory Committee are mainly the responsibility of the Education Authority.

In some areas the question of ascertainment has been found a difficulty in that the Education Authority has no power to notify direct to the Statutory Committee those mentally defective children approaching the age of 16 years who have not been in attendance at a special school. In the rural areas these children must of necessity (due to insufficient Special School Accommodation) be comparatively large in number.

In the Essex Education Committee Area, this difficulty is largely overcome by referring all ascertained mental defectives who have not had special school education for voluntary supervision by the Essex Voluntary Association for Mental Welfare. By this means, those who later show need for Statutory Care are brought to the notice of the Statutory Committee by the Voluntary Association.

This defect in the power of notification, together with the general consideration of the education of the mentally defective, is receiving the careful consideration of the Central Association for Mental Welfare. In co-operation with other important Bodies, the Association has set up Sub-Committees to carefully enquire into this subject in order that they may present a considered report and recommendations with a view to a possible remedy. These Sub-Committees have had several meetings and it is hoped will soon be in a position to present their considered report.

CARE AND CONTROL are provided by way of :—

- (1) *Institutional Care.* This is especially needed and of advantage to :—

- (a) Certain high and medium grade cases with anti-social tendencies.

These are of unstable character, cannot tread the ordinary beaten track in the open world and continually get into trouble, either under the criminal law or by sexual offences, being a nuisance to themselves and to everyone else, as well as probably propagating their species.

- (b) Certain low grade cases who are either most objectionable in their habits, difficult to control, or a grave danger to others together with certain paralytics and epileptics who cannot get efficient care at home.

Institutional care in a well-equipped Institution, such as the Royal Eastern Counties Institution, with its various occupational and training facilities and its specialised branches, affords every opportunity for stabilization of these anti-social defectives. By this means some do attain to sufficient control to return to outside life, whilst the remainder are suitably occupied in congenial surroundings and they themselves, as well as the general public, are safeguarded against their continual failings and anti-social reactions. Further, the low grade and epileptic cases receive any necessary medical care and control, which can only be peripatetic in their own homes, and are employed in occupational pursuits suitable to their low mentality.

(2) *Guardianship, i.e.*, placing the defective under the care of some responsible person. With this method a grant for the maintenance of the patient can be made, the expense to the County Council being thus less than when Institutional care is given.

(3) *Supervision.* The defective is placed under the supervision of some responsible person residing in the locality who undertakes to report periodically and, as occasion requires on the suitability of the circumstances and control under which the defective is living.

(4) *Sterilization.* It had been hoped that by now Parliament might have added another safeguard in dealing with these persons, viz., by bringing in a Bill to legalize Voluntary Sterilization on the lines suggested by the Departmental Committee on Sterilization as presented by the Minister of Health to Parliament in December, 1933.

It will be remembered that the proposals of the Departmental Committee were that, subject to certain safeguards, Voluntary Sterilization should be legalised in the case of :—

- (a) A person who is mentally defective or who has suffered from mental disorder.
- (b) A person who suffers from, or is believed to be a carrier of, a grave physical disability which has been shown to be transmissible.
- (c) A person who is believed to be likely to transmit mental disorder or defect.

Following this report, various Associations and interested Bodies have discussed this subject and the Central Association for Mental Welfare joined other Bodies in the formation of a Joint Committee for Voluntary Sterilization, with a view to educating public opinion and to promoting legislation on the lines of the recommendations of the Departmental Committee.

It now only remains to continue this education of public opinion and await Parliament's pleasure as to the introduction of a suitable Bill, which no one considers will abolish mental defect but nevertheless will be of material assistance in dealing with this ever-present problem.

Figures for 1935 show that at the end of the year the Statutory Committee were responsible for the care or supervision of 1,724 persons, as follows :—

	Males.	Females.	Total.
In Institutions	362	284	646
Under Statutory Supervision	533	435	968
Under Guardianship	21	17	38
Number on licence from Institutions ..	33	39	72
	949	775	1,724

These include 82 placed in Institutions, 9 under Guardianship and 105 under Statutory Supervision during the year.

MENTAL TREATMENT ACT, 1930.

It was mentioned in my Report for 1934 that certain Out-Patient Consultative Clinics had been established, and these have continued during 1935, with the additions therein noted, the Consultants being the Medical Superintendents of Severalls and Brentwood Mental Hospitals, viz., Dr. R. C. Turnbull and Dr. W. G. Masefield.

Information in regard to these clinics is set out below :—

Place.	Day and Time.	Medical Officer.
Colchester. Essex County Hospital	Mondays, 3 p.m. ..	Dr. R. C. Turnbull.
Chelmsford & Essex Hospital	Wednesdays, 2.30 p.m. ..	Do.
Woodford Clinic, 93, High Road, South Woodford	1st and 3rd Tuesdays, 3 p.m. ..	Dr. W. G. Masefield.
Orsett Public Assistance Institution	2nd and 4th Wednesdays, 2.30 p.m.	Do.
Romford. Oldchurch Hospital	Fridays, 2.30 p.m. ..	Do.

In regard to the work at the clinics, including numbers of attendance, &c., the Consultants report as follows :—

Dr. R. C. Turnbull.

“ During the past year weekly Clinics have been held at the Chelmsford Hospital on Wednesday afternoons and at the Colchester Hospital on Monday afternoons. During the year 110 new cases were seen at the Chelmsford Clinic and 100 new cases at the Colchester Clinic. The attendance at the Clinics varies considerably, but the average weekly attendance is six at Chelmsford and eight at Colchester. I think there is undoubtedly a tendency for the number of patients attending the Clinics to increase.”

Dr. W. G. Masefield.

“ At the weekly clinic held at Oldchurch Hospital, Romford, I saw 75 male and 90 female patients last year, who made a total number of 245 attendances. Many of these patients were in-patients of the Hospital, and the majority of the others were accompanied by letters from their doctors.

The Clinics at Woodford and Orsett are held twice monthly, and were opened last March. At the combined health clinic at Woodford 16 male and 21 female patients were seen, with 52 attendances. There are signs that this clinic is becoming increasingly known, and patients have attended there who would not be likely to attend at a Hospital.

At Orsett the numbers have been few, 13 men and 6 women attending as out-patients, but the Medical Officer of the Public Assistance Hospital there is making increasing use of the facilities for advice on patients already in the observation wards.

To sum up, I am of the opinion that the Clinics are definitely serving a useful purpose, and that cases are now being seen in the early stages, who, but for the opportunities offered, would have had no chance of obtaining an expert opinion until far later in the course of the illness."

There is thus evidence that the clinics are serving a very useful purpose, both in assisting patients and providing general practitioners with early and expert advice in regard to mental conditions. It is also understood that in regard to the admissions into the County Mental Hospitals much fuller advantage is being taken of the facilities provided by the 1930 Act.

BLIND PERSONS ACT, 1920.

Reference was made in my Report for 1934 to the re-organization of the scheme for the Care of the Blind, whereby a Special Blind Persons Act Committee had been formed to carry out the duties under the Act. This Committee has continued its work and, for the purposes of certification of the blind and advice on the conditions of the eyesight of any person referred, the expert services of Mr. G. J. Ahern, M.R.C.S., D.O.M.S., County Ophthalmic Surgeon, and consultative service of Mr. T. Collyer Summers, F.R.C.S., have been available. The work under the Blind Persons Act has been correlated and has progressed in close relationship with the general ophthalmic work of the County and School Medical Service.

It may not be out of place to here set out what has been done and what should be visualized in the progress of the work.

The ophthalmic work of the County, owing to its specialised nature, does not readily fit into the separate compartments of Public Health administration. For routine ophthalmic work, special equipment is needed and the number of medical practitioners who undertake the treatment of eye defects are not as numerous as in other branches of medicine.

At the same time, a comprehensive and useful County Ophthalmic Service must include arrangements for the examination and treatment of Maternity and Child Welfare patients and school children, including partially sighted children who have left school at the age of 14 years and for persons who come under the provisions of Section 66 of the Public Health Act of 1925. Accurate certification of all persons added to the blind register by a practitioner experienced in ophthalmology is necessary. In the rural areas, where no hospital facilities are readily available and the services

of an ophthalmologist are not easily obtained or afforded and where indeed travelling expenses constitute a problem in itself, a number of Public Assistance patients require facilities for ophthalmic benefit.

With these requirements in view, 18 ophthalmic examination rooms have been equipped throughout the County. Most of these are in the Combined Treatment Centres, one in the County Hall, Chelmsford, one at Oldchurch Hospital where many persons requiring surgical treatment are referred and in one area the rooms of the National Eye Service Centre are utilised. Each clinic is fitted with a dark room, a retinoscopy lamp and test type (artificially illuminated in accordance with the recommendations of the Ophthalmological Society of the British Isles), trial lenses, &c. The formation of these reasonably well equipped centres and working in co-operation with Oldchurch Hospital, where the services of Mr. T. Collyer Summers, F.R.C.S., are available, make for efficiency and smooth working.

In regard to the work Mr. G. J. Ahern comments as follows :—

- (1) The value of establishing various centres reasonably well equipped is of inestimable value in the accurate certification of blind persons. At present Form B.D.8 is completed in each case. This necessitates the recording of the ophthalmological condition at the time of the examination and the cause or causes primarily responsible for the visual failure. Many persons who apply for their name to be placed on the blind register produce certificates of blindness, but further data is frequently necessary for useful statistical purposes. Transport is always a difficulty with these patients and the system of multiple clinics is convenient. Examination of patients in their own homes is difficult and frequently unsatisfactory.
- (2) The general medical requirements of the Public Assistance patients would appear to be adequately met by the services of the District Medical Officer, but up to recent months the ophthalmic requirements of these patients were open to improvement as regards the distance many had to travel for treatment. With the extension of the system of "free choice of doctor" which has been adopted in certain areas, the number requiring ophthalmic treatment may increase, as many practitioners do not undertake refraction work. These patients can now be most conveniently seen at the nearest centre and those requiring surgical treatment are referred to Oldchurch Hospital, Romford.
- (3) It is desirable that a dark room, fitted with the necessary apparatus and test type should be available in any new sanatorium as the patients frequently suffer from asthenopia. The asthenopia would frequently appear to be associated with their general condition and the large amount of their leisure time spent in reading.

The condition of tuberculous irido-cyclitis is rare, but exists, and, like most tuberculous conditions, requires prolonged treatment. In recent months it has been suggested that results might be better if suitable local eye treatment is associated with sanatorium treatment, including rest, even in those patients with no other active tuberculous lesions.

During 1935 654 persons were examined. Occupational training is arranged by the Committee for all suitable blind persons. 43 persons received periods of training during 1935.

The Home Teachers have been increased by 1, making 8 in all, viz., 1 male, 7 females.

On the 31st March, 1936, the Register of Blind Persons showed a total of 1,584 (male 780, female 804), an increase of 106 (male 48, female 58). Of these, 1,507 (male 736, female 771) are over 16 years of age, and 1,241 of these, viz. (male 531, female 710) are reported as unemployable.

The increase of 106 in the Register is the result of the addition of 265 and removal of 159 names.

Of the 159 removed from the Register, 100 died, 41 removed to other areas, 1 was lost sight of and 17 re-classified as not coming within the definition of a blind person.

Of cases under observation for the prevention of blindness, 519 remain, 42 names being removed from the list and 112 new cases added, leaving a net increase of 70 under observation.

PROPAGANDA AND HEALTH EDUCATION.

HEALTH EXHIBITIONS. The County Council assisted in providing Health Exhibitions in the following districts:—Braintree, Purfleet, Waltham Abbey, Roydon, Mistley, Parndon, Steeple, Southminster, Bradwell-on-Sea, Tillingham and Goldhanger.

HEALTH LECTURES. Members of the staff of the County Public Health Department gave thirty-four lectures during the year to Women's Institutes, Nursing and Midwives Associations, &c.

Each year shows a steadily growing demand for the services of members of the County Public Health Department to give lectures on various aspects of Public Health, and active consideration has been given to the steps that may be taken to co-operate with, and to assist, local Sanitary Authorities in Health Propaganda. There can be no question that Health Propaganda in this country is still in its infancy and there still remains an immense amount of pioneer work to be done in bringing home to the general public the dangers of ignoring their health until feelings of illness drive them to seek medical advice.

That intensive and organised Health Propaganda can play a vital part in procuring good health for the nation is illustrated by certain figures recently quoted by Sir William Crawford. He takes figures from the largest Life Insurance Company in the world, working mainly in the United States. This Company has had a Health Propaganda scheme in operation for 25 years, and the vital statistics for the period 1911-1933 show that during this time in the United States the expectation of life at birth has increased by 16 per cent. (8.3 years) among the general public and 25 per cent. (12.6 years) among the policy holders of this Insurance Company. The figures of the

Insurance Company relate only to the industrial side of its organisation and refer in general to an urban population of the poorer class. Each policy holder had on average more than four years added to his expectancy of life and in view of the intensive health propaganda and education with which he was favoured by the Company, this is a striking and remarkable fact. From the financial aspect the Insurance Company compute the profit on its health expenditure at 200 per cent.

Comparable figures from British census returns show that the average American citizen has nearly a year's longer expectation of life than the average British citizen, so that the policy holders in the Insurance Company referred to had, therefore, five years more expectation of life than the average British citizen. A striking feature from these figures is that the average American and British citizen, despite the differences in occupation and living conditions in the two countries, had less than one year's difference in their expectancy of life, but the policy holders in the American Insurance Company referred to showed a marked improvement on both general groups. This is an immense asset to the general weal of the community in the better health and increased expectation of life in this relatively large group of insured persons and there can be no reason to suppose that the intensive propaganda did not contribute in a very large part to this happy result.

Health Education in this country on the lines instituted by this Insurance Company is practically non-existent, but there can be no question as to the absolute necessity of some such scheme if the British race is to continue to lead the nations of the world to a higher and better state of physical and mental well-being. The Public Health Services cannot undertake alone the task of such magnitude ; it must be a concerted effort, with contributions from all organisations that have any interest, financial or otherwise, in the health of the community.

PROVISION OF HOSPITAL SERVICES.

Considerable progress towards the foundation of future hospital policy and direction has been made during the year by means of the work of the Hospitals Survey Committee and the Public Health Committee.

In the Report for 1934 the preliminary programme of hospital construction was delineated, but it will be readily appreciated that new factors are continually presenting themselves and complicating the problems before the County Council. Among these factors are the provision of additional accommodation at the voluntary hospitals within the County, variation in population masses and revision of arrangements with other Authorities concerning the reception of patients from the Administrative County. Even so, the broad lines of the future policy remain unchanged and a notable step has been the expression by the County Council of the conditions concerning the making of capital grants to voluntary hospitals in aid of extensions, additions and re-organisation.

Briefly, these conditions are as follows :—

(a) In each case there shall be submitted to the Council for its approval—

- (i) Full particulars and plans of the proposals.
- (ii) A detailed estimate of the cost of such proposals.

- (iii) Full particulars of the land and/or buildings to be acquired in connection with the proposals.
- (iv) The tender for the carrying out of the work.
- (b) Where the Council contribute towards the cost of the acquisition of a site or the erection or alteration of a building, the County contribution shall not be made until that portion of the cost of the acquisition of the site or of the erection or alteration of the building (as the case may be) as has been agreed to be found by the hospital, has been raised and no contract for the erection or alteration of a building shall be entered into until the County Council has approved the expenditure.
- (c) The County Council shall be represented upon the Board of Management of the Hospital to such extent as may be agreed upon in each particular case.
- (d) The County Council shall have the right of nomination to an agreed number of beds in the hospital.
- (e) The County Council shall have the right of inspection of the hospital and also of its accounts annually or more frequently as may be agreed.
- (f) Such other conditions as the Council may find to be necessary to meet the circumstances in any individual case.

The place of the voluntary hospitals in the Hospital services of the community deserves a little closer consideration in view of the social changes which have occurred in the past few decades. The voluntary hospitals of to-day are open to probably some 80 per cent. of the whole population. The reasons for this are : firstly, the greatly increased scope of the medical art and the ever widening field of research so created ; and secondly, the tremendous organisation of health services has necessitated the expansion of hospital facilities to ensure the maximum benefit to the community.

The Local Government Act, 1929, has a considerable effect in the services of the voluntary hospitals, for prior to this Act the only destitute persons for whom the ratepayers had to provide accommodation were the destitute sick. The Act gave County Councils and County Borough Councils power to disassociate their hospitals from Poor Law and utilise them as hospitals available to the general population. The Local Authorities have lost no time in making their hospital services efficient, and being relatively unhampered by financial restrictions, are in the position of being able to provide hospital services that cannot be rivalled. The removal of the Poor Law stigma from the rate aided hospitals is leading the general public to judge a hospital on its merits rather than its name or antecedents.

It would be extremely wasteful if competition were to arise between the two hospital systems, but if the voluntary hospitals are to survive in the form we know them to-day, they will have to co-operate and co-ordinate their services with those provided by the Local Authorities.

Consultation and co-operation with the voluntary hospitals of the area is, of course, a statutory obligation of the County Council when framing its future policy.

In this respect it is pleasant to record that cordial relations have been established with the voluntary hospitals in the Administrative County, and that the prospects are bright as to the establishment of the fullest measure of co-operation in providing a comprehensive and efficient hospital service.

NEW COUNCIL HOSPITALS. So far the following sites have been, or are in process of being, purchased :—

1. Crowlands, Chadwell Heath.
2. Hainault Lodge.
3. Hermon Hill, Wanstead.
4. Oak Hill, Walthamstow.
5. Loxford Lane, Ilford.

All these sites are situated in the Southern and South Western Guardians areas of the County, and it is here that there is urgent need for increased hospital facilities.

On the Crowlands site it is proposed to erect a Children's Hospital primarily to accommodate 250 patients but to be capable to expansion to 500 beds when justified by the needs of the population.

At the Hainault Lodge Site it is proposed to erect a Convalescent Home to serve the needs of these two areas.

The remainder of the sites will be for hospitals to take general cases and in the allocation of beds the chronic and infirm group of patients will necessarily receive primary consideration since to this group the County Council has a statutory obligation to discharge.

The Loxford Lane, Ilford, site will probably not be required for building for a considerable number of years, but in view of the great difficulty in the finding of suitable open spaces in the extra-metropolitan part of the County, this acquisition must be considered a wise step on the part of the County Council.

The appropriation of Oldchurch Hospital, Romford, is referred to in the Public Assistance section of this report. When the House inmates from this Hospital are transferred to the new Sutton's Institution, which will probably be available in about two years' time, space will be free at the Hospital for the addition of sick beds to an approximate total of 1,050.

For the other parts of the County, a policy is being framed of envisaging the hospital needs for many years ahead. In view of the rural nature of much of these areas, it is proposed to establish what may be termed "base" hospitals in Chelmsford and Colchester, closely associated with smaller hospitals in the surrounding country areas.

The preparation and preliminary details of the work in connection with the whole scheme has necessitated a large amount of research and collection of information, and in particular close co-operation with the County Architect.

A small deputation from the Public Health Committee, accompanied by the County Medical Officer and the County Architect, visited the Beaujon Hospital, Paris. The Public Assistance Authority of Paris, who are responsible for the erection

of this Hospital, were faced with the same problem as exists in the extra-metropolitan parts of this County—the difficulty of finding sites suitable for the erection of large hospitals. The Beaujon Hospital is the only “vertical” hospital on a large scale in Europe, consisting of 13 floors, accommodating 1,000 patients in a building erected on a site of about 13 acres. The deputation was satisfied as to the practicability of vertical hospital planning, and irrespective of the size of the site available, it was agreed that there is much to be said for this method rather than the more orthodox English method on the “pavilion” plan.

The County Medical Officer and members of the Central Medical Staff have made inspections of many of the English hospitals. These inspections are valuable, not only in obtaining details of planning and construction, but also in examining methods of hospital administration and management.

PART II.

TUBERCULOSIS.

The returns for 1935 show that the incidence, as measured by notifications, continues to decline. The rates recorded in Table XI have reached a new low level. Although there is increasing precision in diagnosis with the staff and facilities now available, there is no reason to believe that the elimination of wrong diagnosis has appreciably affected the notification rate. The assumption that the decline is real and not due to increased laxity in notification appears warranted from a study of Table XII, although it is melancholy to record that since 1930, despite unremitting efforts to secure more complete notification, the proportion of cases dying unnotified shows some rise.

In many of its clinical forms, pulmonary tuberculosis remains an insidious disease till far advanced, and may become manifest only in the terminal stage of some other serious illness, and thus, however careful and conscientious practitioners may be, notification in a proportion of cases must be impossible until a fatal termination is imminent. In cases of tuberculous meningitis the course of the disease is rapid and fatal. But that will not go far to explain that for nearly one-third of all persons dying of tuberculosis in Essex, receipt of notification could not be traced. In the absence of notification the local authority cannot take steps to limit infection, and the unfortunate patient may remain unaware of, and thus unable to benefit by, the treatment which the Council provides. But although the decline in the incidence of tuberculosis is real the abnormal rate (3 per cent.) of increased population in the County, resulting from a sustained influx from the Metropolitan area, together with the general drift of population to the South of England, will tend to counter-balance it to some extent. There is therefore little prospect that the duties of the Council with respect to tuberculosis will grow sensibly less in the near future; in fact, during the past year the number of cases on the County Register rose by 246, so while the rate declines the number increases.

The death rate is a more accurate index of the incidence of tuberculosis for it is less liable to influence from human fallibility, and an anticipated decline in the notification rate may be delayed as the disease is more efficiently sought for and found. Yet the death rates from pulmonary and non-pulmonary tuberculosis, separately and combined ("all forms") are the lowest recorded. Thus we participate in the progress that is being witnessed throughout England and Wales, and the Essex mortality rate for all forms of tuberculosis which in 1930 was 0.75, is now 0.54 per thousand population.

Despite a steady decline, the burden of tuberculosis, unlike that of heart disease and cancer, which are so much commoner in the "downhill of life," still weighs heaviest on those on the threshold and in the prime of life. It still kills 80 to 90 persons daily in England and Wales.

However hopeful the future may be, the present permits of no relaxation of effort.

Notifications.

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1930.

(a) A summary of the notifications made in the Administrative County of Essex during the period 1st January, 1935, to 31st December, 1935, is given below :—

TABLE IX.

	FORMAL NOTIFICATIONS.												Total Notifica- tions.
	Primary Notifications of New Cases of Tuberculosis.												
	Age Periods.												
	0—	1—	5—	10—	15—	20—	25—	35—	45—	55—	65	Total (all ages)	
Pulmonary, Males	—	3	7	5	38	73	189	121	101	58	16	611	703
„ Females	—	—	5	13	67	76	143	73	30	15	8	430	489
Non-Pulmonary, Males	2	31	39	28	18	12	15	8	6	—	2	161	180
„ Females	1	21	34	21	15	16	31	6	6	2	—	153	170

(b) The following summary shows the new cases which came to the knowledge of the Medical Officers of Health during the above-mentioned period, otherwise than by formal notification :—

	Age periods.											Total.
	0—	1—	5—	10—	15—	20—	25—	35—	45—	55—	65—	
Pulmonary, Males	—	1	—	2	2	13	28	14	13	10	2	85
„ Females	—	1	1	—	5	12	25	18	5	4	2	73
Non-pulmonary, Males	—	3	4	5	2	4	3	1	—	—	1	23
„ Females	—	3	2	1	2	6	4	1	—	—	—	19

The sources from which information as to the above-mentioned cases was obtained are shown below :—

Source of Information.					No of Cases.	
					Pulmonary.	Non-Pulmonary.
Death Returns	{	from Local Registrars	...	...	12	5
		transferable deaths from Registrar-General	...	...	10	2
Posthumous Notifications		...	...	...	5	1
"Transfers" from other areas (other than transferable deaths)		...	...	...	117	31
Other Sources (Forms I and II)		...	...	...	14	3

TABLE X.

NOTIFICATION REGISTER.

	Pulmonary.			Non-pulmonary.			Total Cases.
	Males	Females.	Total.	Males	Females	Total.	
Number of cases of Tuberculosis remaining at the 31st December, 1935, on the Registers of Notifications kept by District Medical Officers of Health in the County.	4124	3400	7524	1720	1620	3340	10,864
Number of cases removed from the Registers during the year by reason <i>inter alia</i> of:—							
1. Withdrawal of notification...	28	26	54	14	12	26	80
2. Recovery from the disease...	84	77	161	63	60	123	284
3. Death	299	233	532	43	28	71	603

TABLE XI.

SHOWING ATTACK AND DEATH-RATES FROM TUBERCULOSIS IN THE ADMINISTRATIVE COUNTY OF ESSEX.

YEAR.	Pulmonary Tuberculosis.				Non-Pulmonary Tuberculosis.				Tuberculosis (All Forms).			
	Noti- fica- tions.	Rate per 1,000 Pop.	Deaths.	Rate per 1,000 Pop.	Noti- fica- tions.	Rate per 1,000 Pop.	Deaths.	Rate per 1,000 Pop.	Noti- fica- tions.	Rate per 1,000 Pop.	Deaths.	Rate per 1,000 Pop.
1912-16	Not		851	0.86	Not		269	0.27	Not		1120	1.13
1917-21	avail	able	752	0.89	avail	able	199	0.24	avail	able	951	1.13
1922-26	1110	1.16	656	0.69	320	0.34	148	0.15	1430	1.50	804	0.84
1927-31	1110	1.00	710	0.64	382	0.34	141	0.13	1492	1.34	851	0.77
1932	1188	0.96	683	0.55	425	0.34	165	0.13	1613	1.30	848	0.68
1933	1262	0.99	680	0.53	453	0.35	135	0.11	1715	1.34	815	0.64
1934	1190	0.92	654	0.50	409	0.31	114	0.09	1599	1.23	768	0.59
1935	1041	0.79	604	0.46	314	0.24	113	0.08	1355	1.03	717	0.54

New Cases and Mortality during 1935.

Table XIII. on page 76 is supplied at the request of the Ministry of Health :—

TABLE XII.

SHOWING DEATHS FROM TUBERCULOSIS REGISTERED WITH LOCAL REGISTRARS OF BIRTHS AND DEATHS IN THE ADMINISTRATIVE COUNTY DURING 1935, AND PARTICULARS REGARDING NOTIFICATION UNDER THE PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS (*Transferable Deaths are excluded*).

DISTRICTS.	No. of Deaths.	When Notified.							No Information.
		After Death	Within 3 months of death.	Within 3-6 months of death.	Within 6-12 months of death.	Within 1-2 years of death.	Within 2-4 years of death.	More than 4 years before death.	
Urban.									
Barking B. ...	33	3	5	4	8	5	7	...	1
Benfleet ...	7	...	3	...	1	...	...	...	3
Billericay ...	13	...	1	1	2	2	2	...	5
Braintree & Bocking ...	9	1	1	1	...	1	1	1	3
Brentwood ...	10	...	2	...	...	2	1	1	4
Brightlingsea ...	3	...	...	...	...	...	...	...	3
Burnham-on-Crouch ...	4	...	...	...	1	...	...	...	3
Canvey Island ...	6	...	...	...	1	...	2	1	2
Chelmsford B. ...	13	1	1	2	...	1	1	3	4
Chigwell ...	6	...	...	1	...	1	...	1	3
Chingford ...	15	...	2	2	...	3	3	1	4
Clacton-on-Sea ...	7	...	...	...	...	1	2	...	4
Colchester B. ...	28	1	5	3	2	1	4	4	8
Dagenham ...	31	1	4	2	...	4	7	6	7
Epping ...	2	...	...	...	...	...	...	1	1
Frinton & Walton ...	2	...	...	...	...	1	...	...	1
Halstead ...	...	...	...	...	...	...	...	...	...
Harwich B. ...	5	...	...	...	...	2	2	1	...
Hornchurch ...	34	...	5	3	...	2	6	4	14
Ilford B. ...	62	8	6	4	5	6	9	8	16
Leyton B. ...	58	1	11	5	3	6	15	7	10
Maldon B. ...	...	...	...	...	...	...	...	...	...
Rayleigh ...	6	...	...	1	...	1	1	1	2
Romford ...	29	...	4	2	...	3	4	...	7
Saffron Walden B. ...	2	...	...	...	...	...	...	1	1
Thurrock... ..	40	2	9	2	6	2	5	6	8
Waltham Holy Cross ...	3	...	...	...	2	...	...	...	1
Walthamstow B. ...	64	8	10	7	7	6	4	9	13
Wanstead & Woodford ...	20	1	3	2	2	3	1	3	5
West Mersea ...	1	...	...	...	...	...	...	1	...
Witham ...	...	...	...	...	...	...	...	...	...
Wivenhoe ...	...	...	...	...	...	...	...	...	...
Totals ...	504	27	72	42	40	53	77	60	133
Rural.									
Braintree ...	4	...	1	1	1	...	...	...	1
Chelmsford ...	9	1	...	1	...	...	1	...	6
Dunmow ...	5	...	2	...	...	...	...	...	3
Epping ...	1	...	1	...	...	...	...	...	...
Halstead ...	10	...	2	1	1	1	1	...	4
Lexden & Winstree ...	14	...	3	1	3	2	1	2	2
Maldon ...	8	...	1	1	1	...	...	1	4
Ongar ...	5	1	1	...	1	...	...	...	2
Rochford ...	3	...	2	...	...	1	...	...	...
Saffron Walden ...	6	...	2	...	...	1	...	1	2
Tendring ...	7	...	3	...	2	...	...	1	1
Totals ...	72	2	18	5	9	5	3	5	25
URBAN DISTRICTS ...	504	27	72	42	40	53	77	60	133
RURAL DISTRICTS ...	72	2	18	5	9	5	3	5	25
ADMINISTRATIVE COUNTY...	576	29	90	47	49	58	80	65	158

TABLE XIII.

Age Periods.	New Cases.				Deaths.			
	Pulmonary.		Non-pulmonary.		Pulmonary.		Non-pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
0—	—	—	2	1	—	—	2	2
1—	4	1	34	24	—	—	17	14
5—	7	6	43	36	}	2 4	8	10
10—	7	13	33	22				
15—	40	72	20	17	}	39 61	9	6
20—	86	88	16	22				
25—	217	168	18	35	76	79	9	7
35—	135	91	9	7	92	39	5	5
45—	114	35	6	6	68	27	4	5
55—	68	19	—	2	55	18	2	3
65 and upwards ..	18	10	3	—	27	17	3	2
	696	503	184	172	359	245	59	54

Dispensaries.

Experience justifies the Essex scheme of "Combined" Medical Officers in the rural areas and whole-time specialist Tuberculosis Officers in the Extra-Metropolitan area. The amount of work arising in the rural areas does not justify the services of whole-time Tuberculosis Officers, and the local Medical Officer of Health who acts as part-time Tuberculosis Officer, has at his disposal the advice of Sir Henry Gauvain, Consulting Surgeon, Dr. Burton Wood, Consulting Physician, at clinics held at Farringdon Dispensary, Black Notley Sanatorium, and the Victoria Park Hospital. Where the investigation is carried out locally, Dr. Yell is available for consultation and the taking of the necessary X-Ray films with a portable apparatus. The attendance of the four whole-time Tuberculosis Officers at Dr. Burton Wood's fortnightly clinic at Victoria Park Hospital, is not only of benefit to the obscure cases, but results in free discussion which tends to keep burnished the clinical judgment of the staff.

The main work of the tuberculosis service lies in the Extra-Metropolitan area, where the Tuberculosis Officer must be a whole-time specialist officer with modern facilities for diagnosis at his command, able to give a consultant's opinion, and to gain and retain the confidence of the medical practitioners in his area. Given the right personnel, no single item contributes more to that end than the provision of X-Ray facilities.

So with Health Visitors; it has been found expedient to have whole-time Tuberculosis Nurses in the Extra-Metropolitan area, and although training is essential, qualities of tact, sympathy and common-sense are more valuable than academic distinction.

Institutional Accommodation.

During 1935, there was an average number of 670 beds occupied under the County Tuberculosis Scheme. Of these 500 might be regarded as "treatment" cases and the remaining 170 as "advanced" cases.

(b) NUMBER OF DISPENSARIES FOR THE TREATMENT OF TUBERCULOSIS
(excluding centres used only for special forms of treatment).

Provided by the Council	...	...	...	...	24
Provided by Voluntary Bodies	...	...	...	...	Nil

(c) NUMBER OF BEDS AVAILABLE FOR THE TREATMENT OF TUBERCULOSIS ON
THE 31ST DECEMBER IN INSTITUTIONS BELONGING TO THE COUNCIL.

Name of Institution.	For Pulmonary Cases.		For Non-Pulmonary Cases.		Total.
	Adults.	Children under 15.	Adults.	Children under 15.	
Black Notley	75	11	28	20	192
Harold Court	70	...	...	...	70
High Beech	...	...	...	32	32
Oldchurch Hospital, Romford	36	...	24	15	75
These numbers fluctuate according to requirements.					
<i>Public Assistance Institutions—</i>					
Billericay	1	...	...	...	1
Chelmsford	5	...	...	...	5
Colchester	1	...	...	...	1
Epping	39	...	3	...	42
Maldon	2	...	...	...	2
Orsett	14	...	...	...	14
Tendring	4	...	1	1	6

TABLE. XV.

(a) SHOWING THE EXTENT OF RESIDENTIAL TREATMENT AND OBSERVATION DURING THE YEAR 1935 IN INSTITUTIONS (OTHER THAN PUBLIC ASSISTANCE INSTITUTIONS)

		In Institu- tions on Jan. 1st. (1)	Admitted during the year. (2)	Discharged during the year. (3)	Died in the Insti- tions. (4)	In Institu- tions on Dec. 31st. (5)
Number of doubtfully tuberculous cases ad- mitted for observation	Adult males	4	44	46	1	1
	Adult females	4	38	36	1	5
	Children	12	80	65	1	26
	Total	20	162	147	3	32
Number of patients suffering from pulmon- ary tuberculous	Adult males	245	418	332	57	274
	Adult females	146	269	230	12	173
	Children	13	11	15	—	9
	Total	404	698	577	69	456
Number of patients suffering from non- pulmonary tuberculosis	Adult males	35	39	39	—	35
	Adult females	32	41	51	—	22
	Children	110	109	114	6	99
	Total	177	189	204	6	156
GRAND TOTAL		601	1049	928	78	644

(b) SHOWING THE EXTENT OF RESIDENTIAL TREATMENT PROVIDED DURING THE YEAR 1935 IN PUBLIC ASSISTANCE INSTITUTIONS.

		In Institu- tions on Jan. 1st. (1)	Admitted during the year. (2)	Discharged during the year. (3)	Died in the Insti- tions. (4)	In Institu- tions on Dec. 31st. (5)
Number of patients suffering from pulmon- ary tuberculosis	Adult males	56	163	120	62	37
	Adult females	43	180	107	51	65
	Children	1	2	1	2	—
	Total	100	345	228	115	102
Number of patients suffering from non-pul- monary tuberculosis	Adult males	12	10	11	5	6
	Adult females	17	17	12	—	22
	Children	9	19	11	1	16
	Total	38	46	34	6	44
GRAND TOTAL		138	391	262	121	146

(c) SHOWING THE RESULTS OF OBSERVATION OF DOUBTFULLY TUBERCULOUS CASES DISCHARGED FROM INSTITUTIONS DURING 1935.

Diagnosis on discharge from observation.	FOR PULMONARY TUBERCULOSIS.						FOR NON-PULMONARY TUBERCULOSIS.						TOTALS.		
	Stay under 4 weeks.			Stay over 4 weeks.			Stay under 4 weeks.			Stay over 4 weeks.					
	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.
Tuberculous	1	2	—	9	10	5	—	—	4	2	3	9	12	15	18
Non-tuberculous ..	11	6	6	16	11	10	1	1	5	4	2	25	32	20	46
Doubtful	2	1	1	—	—	—	—	—	—	—	—	—	2	1	1
Died	—	1	—	1	—	—	—	—	—	—	—	1	1	1	1
TOTALS	14	10	7	26	21	15	1	1	9	6	5	35	47	37	66

TABLE XVI.

(g) SHOWING THE IMMEDIATE RESULTS OF TREATMENT OF DEFINITELY TUBERCULOUS PATIENTS DISCHARGED FROM INSTITUTIONS DURING THE YEAR, 1935.

Classification on admission to the Institution.	Condition at time of discharge.	Duration of Residential Treatment in the Institution.															GRAND TOTALS.	
		Under 3 months but exceeding 28 days.			3-6 months.			6-12 months.			More than 12 months.			TOTALS.				
		M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.		
PULMONARY TUBERCULOSIS.	Class T. B. minus.	Quiescent ...	20	12	...	15	16	1	11	12	5	9	13	4	55	53	10	118
		Not quiescent ...	8	6	...	11	5	...	4	6	...	3	5	...	26	22	...	48
		Died in Institution	6	2	...	1	...	...	1	...	...	1	...	...	9	2	...	11
	Class T. B. plus. Group 1.	Quiescent ...	1	1	...	7	2	...	4	8	...	...	2	...	12	13	...	25
		Not quiescent ...	4	1	...	4	6	...	2	1	...	2	1	...	12	9	...	21
		Died in Institution	1	1	...	1	1	...	...	...	...	...	...	...	2	2	...	4
	Class T. B. plus. Group 2.	Quiescent ...	8	7	...	20	20	...	15	14	...	8	16	...	51	57	...	108
		Not quiescent ...	33	10	1	43	24	...	25	9	...	18	5	...	119	48	1	168
		Died in Institution	16	3	...	7	3	...	8	...	...	7	...	...	38	6	...	44
	Class T. B. plus. Group 3.	Quiescent ...	...	...	...	...	...	...	...	1	...	...	1	...	...	2	...	2
		Not quiescent ...	3	...	1	4	2	...	1	1	...	3	...	...	11	3	1	15
		Died in Institution	6	1	...	1	...	...	...	1	...	1	...	...	8	2	...	10
	TOTALS (pulmonary) ...		106	44	2	114	79	1	71	53	5	52	43	4	343	219	12	574
NON-PULMONARY TUBERCULOSIS.	Bones and Joints.	Quiescent ...	1	2	1	5	3	4	3	3	7	4	6	25	13	14	37	64
		Not quiescent ...	1	1	...	...	1	...	...	1	1	3	1	...	4	4	1	9
		Died in Institution	...	...	3	...	...	1	...	...	...	...	...	...	...	...	4	4
	Abdominal.	Quiescent ...	...	1	1	...	4	4	...	5	1	...	2	2	...	12	8	20
		Not quiescent ...	...	2	...	1	2	1	1	1	...	...	...	...	2	5	1	8
		Died in Institution	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Other Organs.	Quiescent ...	...	...	1	...	...	2	...	...	...	...	...	...	2	...	3	5
		Not quiescent ...	1	...	...	...	1	...	1	1	...	1	...	...	3	2	...	5
		Died in Institution	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
	Peri-pheral Glands.	Quiescent ...	3	4	10	1	2	25	...	2	17	...	...	4	4	8	56	68
		Not quiescent ...	...	...	1	1	...	...	1	2	...	...	...	...	2	2	1	5
		Died in Institution	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
	TOTALS (non-pulmonary) ...		6	10	19	8	13	37	8	15	26	8	9	31	50	47	113	190

Although in the advanced cases treatment and nursing cannot be expected to do more than prolong life and ameliorate symptoms, the provision of advanced beds is by no means less important than the ordinary sanatorium provision. From the Public Health point of view the "segregation" value of such beds in reducing opportunities for the spread of tuberculosis is enormous. Moreover, patients leaving the institution return home with some knowledge of how to prevent or minimise infection. These beds should not be too far from the patients' homes; they should be sufficiently attractive to encourage patients to remain in the institution, yet they should not be scattered in many institutions for that implies a lowering of the standard of nursing and accommodation.

The building programme provides for an increase of accommodation at Black Notley Sanatorium from 192 to 300 beds for women and children, both pulmonary and surgical. Up to the present the pulmonary section of this sanatorium has been utilised in the main for the adolescent and young adult group and in which early collapse therapy is so often beneficial. Although 20 more beds will be available for these patients, a pavilion of 40 beds will cater for women a little older, with disease of a more chronic, but less progressive type, and in whom, with adequate treatment, a favourable prognosis may be given. There has been a lack of accommodation in Essex for such patients in the past, and their family responsibilities make it imperative that their claims should not be overlooked.

This pavilion will have a small maternity unit attached so that pregnant women suffering from tuberculosis may have the benefit of sanatorium treatment and not be admitted to hospital because of pregnancy.

The surgical male patients will be transferred to the new 300 bed sanatorium at Broomfield Court where the remaining 250 beds will be reserved for men suffering from tuberculosis of the lungs. Thus in the near future there will be adequate accommodation for "treatment" cases in County Council sanatoria.

Reports follow from the Medical Superintendents of Black Notley, Harold Court and High Beech Sanatoria, and in the report from the first-named institution it will be noted how great is the increase in cases treated by Artificial Pneumothorax. The report of Hartley, Wingfield & Burrows, reprinted from the Brompton Hospital reports, 1935, gives statistical support to the widespread belief amongst workers on the clinical side that the increased adoption of Artificial Pneumothorax treatment constitutes a real advance. It follows, however, that the strain on sanatorium accommodation is likely to be increased, and that the proportion of adult patients in the groups T.B. Minus and T.B. Plus I. and II., whose duration of stay in institutions exceeded 6 months was 23.69 per cent. in 1932, 24.4 per cent. in 1933, 37.55 per cent. in 1934 and 39.17 per cent. in 1935.

The tendency to increase in the length of institutional treatment is not confined to our own County.

(1) COUNTY SANATORIA.

(a) BLACK NOTLEY SANATORIUM. Dr. M. C. Wilkinson, Medical Superintendent of the Black Notley Sanatorium, reports as follows on the work carried out during 1935 :—

Treatment of Pulmonary Tuberculosis. (Consulting Physician : Dr. W. BURTON WOOD). During the year 1935, 157 cases admitted for diagnosis or treatment of pulmonary tuberculosis were discharged from the Sanatorium. A large proportion of these were of the female adolescent group with acute disease. The number of cases suitable for treatment by artificial pneumothorax has risen during the past 18 months from an average of approximately 35 per cent. to an average of approximately 70 per cent. Thus it is apparent that a larger proportion are being admitted at an earlier stage of the disease, when pneumothorax treatment is practicable. Of the 135 patients suffering from pulmonary tuberculosis who were discharged during 1935, 111 were discharged with the disease quiescent. This high rate of apparent recovery may be attributed to the facilities for a sufficiently long period of treatment provided at the Sanatorium, together with the application of the principles, under Dr. Burton Wood's guidance, of rest aided by pneumothorax treatment. I am informed by Dr. Burton Wood that he continues to see many of these patients whose recovery has been maintained over a long time.

During the year a special method of obtaining sputum for examination for tubercle bacilli has been investigated by Dr. Burton Wood and Dr. Cohen. I am informed that the results are in course of preparation for publication.

In addition to treatment by bed rest, other special forms of treatment have been given as follows :—

Number of artificial pneumothorax inductions at Black				
Notley	..	..	..	45
Number of artificial pneumothorax cases under treatment :—				
In-Patients	..	..	..	74
Out-Patients	..	..	..	17
				—
				91
Number of re-fills given :—				
In-Patients	..	..	..	1,096
Out-Patients	..	..	..	161
				—
				1257
Number of phrenic evulsions				12
Number of patients who received treatment by gold				
injections	..	..	..	14

In addition, 28 children who had been admitted for observation or treatment were discharged from the children's medical ward. Of these, 10 had been found to be suffering from pulmonary tuberculosis, 1 from tuberculous pleurisy, and 1 from tuberculous mediastinal glands. Sixteen patients had been found to be non-tuberculous.

Non-Pulmonary Tuberculosis. (Consulting Surgeon : Sir HENRY GAUVAIN). The treatment of non-pulmonary lesions was carried out under the guidance of Sir Henry Gauvain. During the year 1935, 156 patients were discharged from the non-pulmonary side of the Sanatorium. They may be grouped as follows :—

Cases of bone and joint tuberculosis	64
Cases of abdominal tuberculosis	16
Cases of genito-urinary tuberculosis	14
Cases of cervical adenitis	28
Cases of lupus	3
Cases of multiple tuberculous lesions	11
Observation cases discharged non-tuberculous ..	20

Of the 136 patients in whom tuberculous disease was present, 91 were discharged with the disease quiescent: in the majority of these a cure may reasonably be hoped for.

It is interesting to note that non-pulmonary lesions, as well as pulmonary, tend to group themselves in type according to the age and sex of the patient. Tuberculosis of the lymphatic system, with or without bone disease, is common in children. Admissions for peritoneal tuberculosis have been found to be commonest in women, and have been frequently associated with disease starting in the Fallopian tubes. Genito-urinary disease has occurred most frequently in men between the ages of 30 and 40, and has been subsequent in one or more tuberculous lesions in other situations. Non-pulmonary lesions in adult males are frequently associated with pulmonary disease of a non-ulcerative type.

Prolonged rest under open-air conditions has been the basis of treatment. Operative treatment has been used particularly in the treatment of genito-urinary tuberculosis and of tuberculous cervical adenitis. In the treatment of both the latter conditions, open air treatment is a valuable accessory to operation. In all cases of operation for cervical adenitis, the wounds have healed by first intention and relapse has been rare.

The majority of the operations were performed by Mr. R. Reid, F.R.C.S. They were as follows:—

Cystoscopic examinations	46
Synovectomy of knee for diagnosis	4
Excision of tuberculous glands	28
Tonsillectomy	10
Excisions of knee	3
Bone operations—various	11
Phrenic evulsions	12
Epididymectomy or orchidectomy	5
Nephrectomy	6
Amputation	1
Various	20
Tuberculous abscesses or sinuses	34
	180

Immunisation against Diphtheria and Scarlet Fever. Dr. Cohen has been responsible for the immunisation of children admitted to the Sanatorium to diphtheria and scarlet fever. I am indebted to him for the following note on this work :—

“ All children up to the age of 12 years admitted to the Sanatorium are immunised to diphtheria and scarlet fever, subject to the consent of the parents. Diphtheria immunisation is effected by a single injection, and scarlet fever by four weekly injections. The following is a summary of the results obtained for the year ending April 1st, 1936 :—

												Immunisa- tion confirmed by final test.
		Tested on admission.	Immune.	Suscept- tible.	Immunised.	Discharged before final test.						
Diphtheria	..	122	.. 35	.. 87	.. 74	.. 9	..	..	..	..	65	
Immunisation												
Scarlet Fever	..	115	.. 59	.. 56	.. 40	.. 8	..	..	..	..	32	
immunisation												

Reactions to the injections were rare and never severe. One case of diphtheria and one case of scarlet fever occurred during the year, both in children soon after admission, before immunisation was completed. No secondary cases arose from these.”

X-Ray Department. (Consulting Radiologist : Dr. FRANKLIN WOOD). During the year considerable advance was made in this department by the installation of a shock-proof apparatus and table. This has been found to be of special advantage in X-Raying infants. Many mechanical improvements increasing facility in the work were incorporated in the new apparatus.

A new screen for screening patients in the erect position was also installed. Owing to the marked improvement effected by this screen, many more screening examinations have been made than previously :—

Number of patients X-Rayed during the year	..	1950
Screening examinations (approximately) ..	..	12 to 15 per week.

Artificial Light Treatment. (Consulting Dermatologist : Dr. A. BURROWS). The artificial light treatment department continues to be used to its full capacity. A new lamp for infra-red ray therapy was installed during the year. The number of treatments were as follows :—

General treat- ments	.. Carbon arc lamps	.. 1,905 treatments.
	Mercury vapour lamps	.. 1,408 treatments.
Local treatments	.. Infra-red ray therapy	.. 167 treatments.
	Kromayer lamp	.. 250 treatments.

Laboratory. Miss M. D. Williams, Dispenser-Clerk, has done valuable work in doing much of the routine laboratory work at the Sanatorium. The following are particulars of these examinations :—

Sputum examinations	..	..	561
Urine examinations	..	..	294
Blood counts	..	..	22
Blood sedimentation rates	..	..	440
Various	..	..	33
			1,350

In addition a considerable number of specimens are forwarded to the Counties Public Health Laboratories for examination.

Out-Patient Department. During 1935 continued use was made of the facilities at the Sanatorium for the treatment of out-patients. Numbers attending the various departments were as follows :—

To see Sir Henry Gauvain	..	..	45
Dr. Burton Wood's clinics	..	..	294
Attendances for A.P. re-fills	..	..	161
Attendances for X-Rays	..	..	144
Attendances for light treatment	..	..	150
Attendances—various	..	..	24
			818

By arrangement with the County Medical Officer, Mr. Ahern has visited the Sanatorium from time to time to advise concerning ophthalmic treatment.

Regular dental inspections and treatment have been carried out by Mr. S. K. Donaldson for all patients.

Finally my appreciation should be expressed of the valuable services rendered to the Sanatorium during the past year by my colleague, Dr. R. C. Cohen, and to the Matron and Nursing Staff for the high standard of nursing maintained.

Patients discharged from January 1st, 1935, to December 31st, 1935.

Non-Pulmonary Adults.

				Quiescent.	Improved.	Not improved.
Adenitis	..	..	..	14	0	0
Peritonitis	..	..	..	7	1	3
Spine	..	..	..	10	3	4
Hip	..	..	..	3	0	0
Sacro-iliac	..	..	..	2	0	0
Various	..	..	..	6	4	1
Multiple lesions	..	..	..	6	1	4
Genito-urinary	..	..	..	2	6	6
Lupus	..	..	..	0	1	0
Observation cases discharged as negative	..	..	..	6	0	0
Admitted as tuberculous—diagnosis not confirmed	..	..	..	5	0	0
				61	16	18
Total				..	95	

Pulmonary Adults.

	Quiescent.	Improved.	Not improved.
Pulmonary tuberculosis—ages between 14—28 years	70	12	13
Pulmonary tuberculosis—over 28 years	11	4	13
Observation cases discharged as negative	6	0	0

Children under 14 years.

Pulmonary tuberculosis	6	1	3
Observation cases discharged as negative	16	0	0
Tuberculous pleurisy	1	0	0
Hilum tuberculosis	1	0	0
	111	17	29
Total ..	157		

Non-Pulmonary Children.

	Quiescent.	Improved.	Not improved.
Adenitis	13	1	0
Peritonitis	4	1	0
Spine	13	0	2
Hip	4	1	2
Knee	4	0	1
Mixed	0	0	0
Lupus	1	1	0
Various	2	0	2
Observation discharged as negative ..	4	0	0
Admitted as tuberculous — diagnosis not confirmed	5	0	0
	50	4	7
Total ..	61		

Total number of pulmonary cases discharged ..	157
Total number of non-pulmonary cases discharged ..	156
Total number of patients discharged ..	313

(b) HAROLD COURT SANATORIUM. Dr. F. G. Brown, Medical Officer of the Harold Court Sanatorium, reports as follows on the work carried out during 1935 :—

On April 1st, 1935, I took over the duties of Medical Superintendent at Harold Court Sanatorium from Dr. J. S. Harper.

The following table gives particulars of patients admitted and discharged during the year :—

No. of patients admitted during the year	..	198
No. of patients discharged during the year as follows :—		
Discharged home after a period of treatment	..	133
Transferred to Ilford Sanatorium	..	27
„ Victoria Park Hospital	..	11
„ Preston Hall	..	10
„ Royal National Sanatorium, Bournemouth	..	9
„ Burrow Hill Training Colony	..	2
„ Liverpool Road Hospital	..	2
„ Black Notley Sanatorium	..	1
„ Epping Public Assistance Institution	..	1
„ Tendring Public Assistance Institution	..	1
„ Oldchurch Hospital	..	1
		198

No deaths occurred at the Sanatorium during the year.

Patients who were discharged with disease quiescent, or who had made material improvement—71 per cent.

Patients who, on discharge had either made no improvement or slight improvement only—19 per cent.

X-Ray Department. X-Ray photographs have been taken during the year as follows :—

In-Patients	..	..	..	680
Out-patients	..	..	..	392
Staff	..	..	..	33
Total	..	..	..	1,105

The X-Ray apparatus has worked satisfactorily and a high standard of film has been maintained.

Treatment.

Artificial Pneumothorax. 55 patients received 777 artificial pneumothorax refills, 52 of these were in-patients and 8 attended as out-patients (5 of the 8 having previously been treated as in-patients during the year).

Of the 52 in-patients, 22 were induced at Harold Court during the year, 11 were carried over from the previous year and 19 had artificial pneumothorax treatment commenced at other Institutions previous to their admission here.

The out-patient refill clinic enables patients, whose homes are conveniently situated to the Sanatorium, to continue their artificial pneumothorax treatment here after having been discharged from the Institution. This is of great value as it enables one to keep in touch with ex-patients and to observe their reactions to outside conditions.

Artificial pneumothorax employed in suitable cases, is undoubtedly the most satisfactory method of active treatment for Pulmonary Tuberculosis.

Gold Therapy. A total number of 23 patients received this treatment during the year, 13 in the form of Sanocrysin and 10 in the form of Solganol "B." A total of 283 injections was given.

I have formed the opinion that this form of treatment is of definite value in a limited number of carefully selected cases, with recent exudative lesions in which it is not possible or desirable to employ collapse therapy, and that it should be given intravenously, as Sanocrysin.

Chronic cases, not likely to benefit by a prolonged stay in the Sanatorium, are given a short course of educational treatment.

Certain cases are transferred to the British Legion Village at Preston Hall. These are mainly cases of fibro-caseous disease with the fibrotic element predominating, which, although they are not likely to improve further except by a very prolonged sanatorium stay, are unsuited for return to their homes and which, were they permitted to do so, would almost certainly break down. I have been informed by the Medical Director of Preston Hall that in the large majority of cases sent from here, improvement in their condition is being maintained.

Dental Treatment. Mr. Roberts, County Dental Surgeon, has visited the Sanatorium at frequent intervals. Both extractions and fillings have been carried out, this treatment proving of great benefit to the patients.

Laboratory Work. The estimation of the Blood Sedimentation Rate by means of Westergren's Tubes was commenced at the Sanatorium in June, 1935. This has been found of much value in assessing the patient's resistance to the disease and in estimating the progress made under treatment.

During the year the waiting list has, at times, been very high, early cases having had to wait a considerable period before being admitted. As a

result of this it has been decided to extend the accommodation from 70 to 90 beds, and a new 20-bedded pavilion is at present being constructed on the site of the old farm buildings, which have recently been demolished.

In conclusion, I should like to thank Dr. Burton Wood for the help which he has given me and for the unfailing interest he takes in the Sanatorium.

(c) HIGH BEECH SANATORIUM. Dr. L. S. Fry, Medical Officer of the High Beech Sanatorium, has forwarded the following report for 1935 :—

Total number of cases admitted during year	..	74
Total number of cases discharged during year	..	78
Analysis of new cases :—		
Cervical glands		52
Abdominal tuberculosis		12
Bone and joint tuberculosis		10

(These include cases admitted for observation).

One child was found to be suffering from Pseudo-hypertrophic Muscular Dystrophy and one from Hodgkin's disease. This latter case subsequently died in Victoria Park Hospital.

The Mantoux test in series was carried out on all cases in which the diagnosis was in doubt.

Total number of cases Mantoux tested	..	27
Total number of cases negative (3 dilutions)	..	15

One case of Scarlet Fever occurred during the year and there were also small outbreaks of Chickenpox and Measles. In the case of the latter disease the contacts in the ward who had not had Measles were given convalescent serum and no further cases occurred.

Schick tests were carried out as a routine on all cases admitted unless known to have been previously tested, and those giving a positive reaction immunised with Alum Toxoid subcutaneously. The results with this antigen were as follows :—

Schick negative 8 weeks after 1 injection of Alum Toxoid		23
Schick negative 4—8 weeks after 2 injections of Alum Toxoid		9
Schick positive after 1 injection of Alum Toxoid		14
(These include the 9 cases given 2 injections).		
Discharged before re-Schicking		11
Naturally Schick negative or previously immunised		13

It will be seen that 38 per cent. of the cases given Alum Toxoid gave a positive Schick test 8 weeks after the first injection, which points clearly to the importance of carrying out a final Schick test when using the so called

"one shot" method with this particular brand of Alum Toxoid. There is evidence, however, that a rather higher percentage of cases would have been found negative if they had been Schick-tested 3 months, instead of 8 weeks after injection.

Travelling Facilities for Patients.

An amount of £48 10s. 3d. was expended during the year in providing necessitous patients with free travelling vouchers upon admission or discharge from institutions, and special visits to "Out-patient" Departments.

X-Rays.

X-Rays present a great advance on the older methods of chest investigation. It would be superfluous to point out how much and how long the diagnosis and treatment of Bone and Joint disease has depended on X-Rays, but their application and development in connection with chest conditions is of more recent growth. Their extensive employment costs money, but this expenditure is amply repaid. Correct diagnosis is the foundation on which any successful scheme must rest. The number of films—2,952—shown in Table XIV taken in connection with dispensary work in 1935, is more than treble that taken in 1930, but the proportion of cases in which diagnosis was not completed at the end of the year is halved. With X-Ray provision come two problems, those of technique and interpretation. With advance in design of apparatus, technique shows obvious improvement, and the proportion of poor films seen nowadays is much smaller than it was a few years ago. A very poor film leaves the expert guessing, and no matter how good a film may be, only expert knowledge and experience can make full use of it. A chest skiagram is unintelligible to the uninitiated, and a little knowledge is doubly dangerous. Nevertheless, a good chest clinician can never afford to discard his stethoscope, since although X-Ray examination may be more important than the stethoscope, they are not mutually exclusive, but complementary.

X-Rays for Tuberculosis Officers are taken at the following Centres :—

Harold Court Sanatorium.

Black Notley Sanatorium.

Walthamstow Dispensary.

City of London Hospital for Diseases of Heart and Lungs, Victoria Park,
E.2.

Oldchurch Hospital, Romford.

King George Hospital, Ilford.

Chelmsford General Hospital.

Whipps Cross Hospital.

Essex County Hospital, Colchester.

The County elsewhere is covered by the portable unit. Special mention must be made of the Walthamstow Dispensary, where pulmonary patients from the surrounding areas—Walthamstow, Leyton, Woodford, Chingford and Epping are X-Rayed—

surgical cases still being referred to Whipps Cross Hospital. The installation of X-Ray apparatus at the Walthamstow Dispensary was referred to in the Annual Report for 1934. In the hands of Dr. Ramsay, the Tuberculosis Officer for Walthamstow, and Miss Stuttard, Radiographer, it has produced work of a very high quality, and has amply justified the expenditure.

Artificial Pneumothorax.

It has been the practice in Essex to keep the prime function of the tuberculosis dispensary that of a centre for diagnosis, consultation and advice, and patients requiring artificial pneumothorax refills have attended as out-patients at Black Notley or Harold Court Sanatoria, or at Victoria Park Hospital, whichever the individual found most convenient, a few preferring to continue attendance at other London hospitals where their course of treatment had been initiated. X-Ray control which is essential in this treatment is now available at the Walthamstow Dispensary, and there a Refill Clinic has been set up.

Bacteriological Specimens.

Almost a corollary to the increased employment of X-Rays, is that the number of specimens of sputum examined should go down. The X-Ray film makes repetition of sputum examinations less necessary than it was by enabling the Tuberculosis Officer to arrive quicker at a diagnosis, and to give an earlier reassurance to a patient in whom a suspicion of tuberculosis proves unfounded. But if the number of specimens of sputum sent for examination by Tuberculosis Officers is added to the number sent by general practitioners, 1935 shows an increase of 1,378 specimens over 1934. Yet the number of consultations between Tuberculosis Officers and general practitioners is not falling, and it is thus evident that while continuing to make use of the services of Tuberculosis Officers, medical practitioners are making increased use of the facilities for sputum examinations offered by the County.

Examination of Contacts.

Although calculations on the increased rate of the incidence of tuberculosis in households where a sputum-positive case is found have not always been made on data which would satisfy a statistician, statistical proof is not lacking that a relatively high incidence is in fact found in such circumstances. Published figures from Lancashire and Worcestershire are well known. Nevertheless, the widespread belief outside medical circles that tuberculosis is a hereditary disease is not well founded. It is possible that some stocks like some races have a low resistance to tuberculosis, but evidence is in favour of the size of the infecting dose being all-important in determining whether or not frank disease will result after a varying period of latency. What tuberculosis worker has not met with families where one member after another is attacked on reaching adolescence? The opportunities for infection are obviously greater in the intimacies of the home than in the casual contacts with the outside world. The practical outcome is that measures designed to prevent tuberculosis are most likely to be fruitful if specially directed to families in which the malady has already shown itself. Examination of contacts may reveal disease in its earliest and thus most curable stage: it may discover the original source of infection, which may lead to the elimination of

predisposing conditions, and lastly, it will bring propaganda to bear on the point where it is most needed. The Joint Tuberculosis Council recently published a Memorandum in which it was stated that the examination of all contacts was impracticable, and certain selected groups were named in which special investigation might be undertaken and repeated.

It is disappointing to find that the number of contacts examined per new adult pulmonary case has declined from 0.75 in 1930 to 0.5 in 1935. Although by reason of strict definition the number of contacts examined is much under-estimated, yet all Tuberculosis Officers report difficulty in persuading adolescent and young adult contacts to submit to examination, despite judicious propaganda on the part of the dispensary staff. It is just this group—adolescent and young adult—in which pulmonary tuberculosis is most likely to occur and to make the greatest advance in the briefest time. But if pulmonary tuberculosis has occurred in one member of a family, any suspicious departure from health in the household, particularly in the case of young adults or adolescents, demands immediate specialist investigation such as the dispensary offers, for here loss of time is irreparable and X-Ray examination is invaluable.

It is estimated that about one in every twelve persons dying of Tuberculosis in England and Wales is killed by contact with the infection through the medium of cows' milk. The subject is referred to elsewhere in this report.

Prevention.

This is not a circumscribed part of the scheme, but is covered in various ways by the dispensary, the sanatorium, the hospital, and the care association, and is the thread which runs through the scheme from pattern which makes up the Public Health Service.

Section 62 of the Public Health Act, 1925, which in certain specified circumstances enables a Local Authority to remove compulsorily an infectious tuberculous patient to hospital, has been a valuable means of moral suasion, but in the past five years only once in Essex have its full powers been invoked, and in that case unsuccessfully.

The number of shelters on loan from the County in 1930 was 85, compared with 83 in 1935. These shelters might be employed more extensively. Although their adoption took place with the idea of enabling patients to carry on a modified sanatorium routine after returning home, they have the important preventive function of providing the separate sleeping accommodation which is so often lacking. Not all patients are suitable for shelters, and unfortunately many regard them as a form of publicity from which they shrink.

Care Associations.

Whilst infection with the tubercle bacillus of Koch is the essential cause of tuberculosis, the development of the disease is dependent on a complexity of factors, and tuberculosis is recognised as a social disease. There is room for much valuable anti-tuberculosis work outside the official scheme. Care Associations sprang from a recognition of the needs of patients with chronic progressive disease in whom the possibility of recovery of earning capacity was very remote. The associations set themselves the

task of tiding patients over the transition period between discharge from sanatorium and return to work, of providing comforts and occupational therapy, sometimes securing employment and occasionally better housing conditions. They were essentially "after-care" associations. In these days, even the most influential association has little hope of success in its efforts to place in employment any considerable number of those for whom its services might be solicited in competition with the physically fit, but activities in Essex have extended in the direction of prevention. They are no longer "After-Care" Associations merely, but the principle that "the family is the unit" is generally accepted; that is to say, the associations recognise that by looking to the future and by caring not only for the patients, but for the children and young persons exposed to heavy infection in poor homes, their work is most likely to be fruitful. It is a practical impossibility to "colonise" all the tuberculous population, but it is the ideal of the care associations to make home conditions approximate to those obtaining in village settlements. On the advice of the District Tuberculosis Officers, extra nourishment and periods in convalescent homes are provided for selected contacts. Sir Humphry Rolleston remarked that many an incipient case of tubercle might be aborted by taking a holiday at the right time.

It is with regret that I have to record that the Halstead Tuberculosis Care Association ceased to function as from 30th September, 1935.

The associations are financed by the funds raised by their members, together with an annual grant from the County Council, which in 1930 amounted to £375 and in 1935 to £872.

During the past five years the annual income of the care associations in Essex has risen from £2,821 in 1930 to £4,156 in 1935, inclusive of the County Council grant. The County further provides medical and in most cases clerical services, and the actual expenditure on stationery up to £20 per annum. The contribution of these voluntary bodies to the prevention of tuberculosis in Essex is an important one. The visits of their members carry kindly propaganda into the homes.

In addition to the extra nourishment granted by Care Associations, the County Council allow milk to patients coming within special categories. During 1935, 210 patients were allowed milk by the County Council and the cost amounted to £463 3s. 7d.

TABLE XVII.

TUBERCULOSIS CARE ASSOCIATIONS IN ESSEX.

(The information given in this Table is in respect to the year ended 31st March, 1936).

Name of Association.	Day and Time of Meetings.	Income including Balance in hand.	Expenditure.		Total No. of Cases assisted.	Nature of Assistance Provided.
			Assistance.	Other Items.		
BARKING ...	Third Monday in each month at 8 p.m.	£ s. d. 327 14 1	£ s. d. 190 0 9	£ s. d. 6 1 8	61	Extra Nourishment Convalescent Holiday Treatment Fares Clothing
CHELMSFORD ...	Fourth Monday in each month at 7 p.m. (except August)	No. 1 a/c. 318 0 7	201 14 2	27 6 9	27	Extra Nourishment Convalescent Holiday Treatment
		*No. 2 a/c. 90 1 9	82 18 2	10 0	18	Fares Clothing. Surgical appliances
DAGENHAM ...	Third Thursday in each month at 8.15 p.m.	372 6 2	362 6 7	20 3 4	77	Extra Nourishment Fares Clothing Boarding-outfees
GRAYS ...	Third Monday in each month at 5.30 p.m.	388 5 0	211 13 3	15 13 7	41	Extra Nourishment Convalescent Holiday Treatment Clothing Fares Employment
ILFORD ...	First Thursday in each month at 7.30 p.m.	933 13 3	639 12 5	27 9 2	90	Extra Nourishment Convalescent Holiday Treatment Fares Boarding-outfees
LEYTON ...	Third Friday in each month at 7.30 p.m.	818 16 10	634 8 0	47 6 11	142	Extra Nourishment Convalescent Holiday Treatment Clothing
ROMFORD ...	Fourth Tuesday in each month at 8 p.m.	647 5 1	363 19 3	34 7 11	75	Extra Nourishment Convalescent Holiday Treatment Fares Clothing Boarding-out of children
SAFFRON WALDEN	Fourth Tuesday in each month at 2.30 p.m.	144 12 0	111 10 4	6 6 11	37	Extra Nourishment Convalescent Holiday Treatment Fares
WALTHAMSTOW	First Friday in each month at 7 p.m.	749 4 4	511 19 0	53 2 7	133	Extra Nourishment Convalescent Holiday Treatment Fares Clothing Dentures Home helps

*This refers to special fund for those areas in the County not served by a Tuberculosis Care Association.

TABLE VIII

Summary of the results of the experiments

Experiment No.		Date		Time		Temperature		Humidity		Wind		Direction		Speed		Remarks	
1		1910		10:00		75		60		S		10		Clear		Good	
2		1910		11:00		78		65		S		12		Clear		Good	
3		1910		12:00		80		70		S		15		Clear		Good	
4		1910		13:00		82		75		S		18		Clear		Good	
5		1910		14:00		85		80		S		20		Clear		Good	
6		1910		15:00		88		85		S		22		Clear		Good	
7		1910		16:00		90		90		S		25		Clear		Good	
8		1910		17:00		92		95		S		28		Clear		Good	
9		1910		18:00		95		100		S		30		Clear		Good	
10		1910		19:00		98		105		S		32		Clear		Good	
11		1910		20:00		100		110		S		35		Clear		Good	
12		1910		21:00		102		115		S		38		Clear		Good	
13		1910		22:00		105		120		S		40		Clear		Good	
14		1910		23:00		108		125		S		42		Clear		Good	
15		1910		24:00		110		130		S		45		Clear		Good	
16		1910		25:00		112		135		S		48		Clear		Good	
17		1910		26:00		115		140		S		50		Clear		Good	
18		1910		27:00		118		145		S		52		Clear		Good	
19		1910		28:00		120		150		S		55		Clear		Good	
20		1910		29:00		122		155		S		58		Clear		Good	
21		1910		30:00		125		160		S		60		Clear		Good	
22		1910		31:00		128		165		S		62		Clear		Good	
23		1910		32:00		130		170		S		65		Clear		Good	
24		1910		33:00		132		175		S		68		Clear		Good	
25		1910		34:00		135		180		S		70		Clear		Good	
26		1910		35:00		138		185		S		72		Clear		Good	
27		1910		36:00		140		190		S		75		Clear		Good	
28		1910		37:00		142		195		S		78		Clear		Good	
29		1910		38:00		145		200		S		80		Clear		Good	
30		1910		39:00		148		205		S		82		Clear		Good	
31		1910		40:00		150		210		S		85		Clear		Good	
32		1910		41:00		152		215		S		88		Clear		Good	
33		1910		42:00		155		220		S		90		Clear		Good	
34		1910		43:00		158		225		S		92		Clear		Good	
35		1910		44:00		160		230		S		95		Clear		Good	
36		1910		45:00		162		235		S		98		Clear		Good	
37		1910		46:00		165		240		S		100		Clear		Good	
38		1910		47:00		168		245		S		102		Clear		Good	
39		1910		48:00		170		250		S		105		Clear		Good	
40		1910		49:00		172		255		S		108		Clear		Good	
41		1910		50:00		175		260		S		110		Clear		Good	
42		1910		51:00		178		265		S		112		Clear		Good	
43		1910		52:00		180		270		S		115		Clear		Good	
44		1910		53:00		182		275		S		118		Clear		Good	
45		1910		54:00		185		280		S		120		Clear		Good	
46		1910		55:00		188		285		S		122		Clear		Good	
47		1910		56:00		190		290		S		125		Clear		Good	
48		1910		57:00		192		295		S		128		Clear		Good	
49		1910		58:00		195		300		S		130		Clear		Good	
50		1910		59:00		198		305		S		132		Clear		Good	
51		1910		60:00		200		310		S		135		Clear		Good	
52		1910		61:00		202		315		S		138		Clear		Good	

1842				1843				1844				1845				1846				1847				1848				1849				1850				1851				1852				1853				1854				1855				1856				1857				1858				1859				1860				1861				1862				1863				1864				1865				1866				1867				1868				1869				1870				1871				1872				1873				1874				1875				1876				1877				1878				1879				1880				1881				1882				1883				1884				1885				1886				1887				1888				1889				1890				1891				1892				1893				1894				1895				1896				1897				1898				1899				1900				1901				1902				1903				1904				1905				1906				1907				1908				1909				1910				1911				1912				1913				1914				1915				1916				1917				1918				1919				1920				1921				1922				1923				1924				1925				1926				1927				1928				1929				1930				1931				1932				1933				1934				1935				1936				1937				1938				1939				1940				1941				1942				1943				1944				1945				1946				1947				1948				1949				1950				1951				1952				1953				1954				1955				1956				1957				1958				1959				1960				1961				1962				1963				1964				1965				1966				1967				1968				1969				1970				1971				1972				1973				1974				1975				1976				1977				1978				1979				1980				1981				1982				1983				1984				1985				1986				1987				1988				1989				1990				1991				1992				1993				1994				1995				1996				1997				1998				1999				2000				2001				2002				2003				2004				2005				2006				2007				2008				2009				2010				2011				2012				2013				2014				2015				2016				2017				2018				2019				2020				2021				2022				2023				2024				2025				2026				2027				2028				2029				2030				2031				2032				2033				2034				2035				2036				2037				2038				2039				2040				2041				2042				2043				2044				2045				2046				2047				2048				2049				2050				2051				2052				2053				2054				2055				2056				2057				2058				2059				2060				2061				2062				2063				2064				2065				2066				2067				2068				2069				2070				2071				2072				2073				2074				2075				2076				2077				2078				2079				2080				2081				2082				2083				2084				2085				2086				2087				2088				2089				2090				2091				2092				2093				2094				2095				2096				2097				2098				2099				2100				2101				2102				2103				2104				2105				2106				2107				2108				2109				2110				2111				2112				2113				2114				2115				2116				2117				2118				2119				2120				2121				2122				2123				2124				2125				2126				2127				2128				2129				2130				2131				2132				2133				2134				2135				2136				2137				2138				2139				2140				2141				2142				2143				2144				2145				2146				2147				2148				2149				2150				2151				2152				2153				2154				2155				2156				2157				2158				2159				2160				2161				2162				2163				2164				2165				2166				2167				2168				2169				2170				2171				2172				2173				2174				2175				2176				2177				2178				2179				2180				2181				2182				2183				2184				2185				2186				2187				2188				2189				2190				2191				2192				2193				2194				2195				2196				2197				2198				2199				2200				2201				2202				2203				2204				2205				2206				2207				2208				2209				2210				2211				2212				2213				2214				2215				2216				2217				2218				2219				2220				2221				2222				2223				2224				2225				2226				2227				2228				2229				2230				2231				2232				2233				2234				2235				2236				2237				2238				2239				2240				2241				2242				2243				2244				2245				2246				2247				2248				2249				2250				2251				2252				2253				2254				2255				2256				2257				2258				2259				2260				2261				2262				2263				2264				2265				2266				2267				2268				2269				2270				2271				2272				2273				2274				2275				2276				2277				2278				2279				2280				2281				2282				2283				2284				2285				2286				2287				2288				2289				2290				2291				2292				2293				2294				2295				2296				2297				2298				2299				2300				2301				2302				2303				2304				2305				2306				2307				2308				2309				2310				2311				2312				2313				2314				2315				2316				2317				2318				2319				2320				2321				2322				2323				2324				2325				2326				2327				2328				2329				2330				2331				2332				2333				2334				2335				2336				2337				2338				2339				2340				2341				2342				2343				2344				2345				2346				2347				2348				2349				2350				2351				2352				2353				2354				2355				2356				2357				2358				2359				2360				2361				2362				2363				2364				2365				2366				2367				2368				2369				2370				2371				2372				2373				2374				2375				2376				2377				2378				2379				2380				2381				2382				2383				2384				2385				2386				2387				2388				2389				2390				2391				2392				2393				2394				2395				2396				2397				2398				2399				2400				2401				2402				2403				2404				2405				2406				2407				2408				2409				2410				2411				2412				2413				2414				2415				2416				2417				2418				2419				2420				2421				2422				2423				2424				2425				2426				2427				2428				2429				2430				2431				2432				2433				2434				2435				2436				2437				2438				2439				2440				2441				2442				2443				2444				2445				2446				2447				2448				2449				2450				2451				2452				2453				2454				2455				2456				2457				2458				2459				2460				2461				2462				2463				2464				2465				2466				2467				2468				2469				2470				2471				2472				2473				2474				2475				2476				2477				2478				2479				2480				2481				2482				2483				2484				2485				2486				2487				2488				2489				2490				2491				2492				2493				2494				2495				2496				2497				2498				2499				2500				2501				2502				2503				2504				2505				2506				2507				2508				2509				2510				2511				2512				2513				2514				2515				2516				2517				2518				2519				2520				2521				2522				2523				2524				2525				2526				2527				2528				2529				2530				2531				2532				2533				2534				2535				2536				2537				2538				2539				2540				2541				2542				2543				2544				2545				2546				2547				2548				2549				2550				2551				2552				2553				2554				2555				2556				2557				2558				2559				2560				2561				2562				2563				2564				2565				2566				2567				2568				2569				2570				2571				2572				2573				2574				2575				2576				2577				2578				2579				2580				2581				2582				2583				2584				2585				2586				2587				2588				2589				2590				2591				2592				2593				2594				2595				2596				2597				2598				2599				2600				2601				2602				2603				2604				2605				2606				2607				2608				2609				2610				2611				2612				2613				2614				2615				2616				2617				2618				2619				2620				2621				2622				2623				2624				2625				2626				2627				2628				2629				2630				2631				2632				2633				2634				2635				2636				2637				2638				2639				2640				2641				2642				2643				2644				2645				2646				2647				2648				2649				2650				2651				2652				2653				2654				2655				2656				2657				2658				2659				2660				2661				2662				2663				2664				2665				2666				2667				2668				2669				2670				2671				2672				2673				2674				2675				2676				2677				2678				2679				2680				2681				2682				2683				2684				2685				2686				2687				2688				2689				2690				2691				2692				2693				2694				2695				2696				2697				2698				2699				2700				2701				2702				2703				2704				2705				2706				2707				2708				2709				2710				2711				2712				2713				2714				2715				2716				2717				2718				2719				2720				2721				2722				2723				2724				2725				2726				2727				2728				2729				2730				2731				2732				2733				2734				2735				2736				2737				2738				2739				2740				2741				2742				2743				2744				2745				2746				2747				2748				2749				2750				2751				2752				2753				2754				2755				2756				2757				2758				2759				2760				2761				2762				2763				2764				2765				2766				2767				2768				2769				2770				2771				2772				2773				2774				2775				2776				2777				2778				2779				2780				2781				2782				2783				2784				2785				2786				2787				2788				2789				2790				2791				2792				2793				2794				2795				2796				2797				2798				2799				2800				2801				2802				2803				2804				2805				2806				2807				2808				2809				2810				2811				2812				2813				2814				2815				2816				2817				2818				2819				2820				2821				2822				2823				2824				2825				2826				2827				2828				2829				2830				2831				2832				2833				2834				2835				2836				2837				2838				2839				2840				2841				2842				2843				2844				2845				2846				2847				2848				2849				2850				2851				2852				2853				2854				2855				2856				2857				2858				2859				2860				2861				2862				2863				2864				2865				2866				2867				2868				2869				2870				2871				2872				287			
------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	------	--	--	--	-----	--	--	--

TABLE XII.

(H) NON-PULMONARY TUBERCULOSIS.

Table showing in summary form (a) the condition at the end of 1933 of all patients remaining on the Dispensary Register and (b) the reasons for the removal of all cases written off the Register.

Condition at the time of the last medical examination during the year to which the figures refer.		Previous to 1936				1936				1937				1938				1939				1940				1941				1942				1943				1944				1945				1946			
		Exam and Admitted.	Other Expos.	Prefigured Status.	Total.	Exam and Admitted.	Other Expos.	Prefigured Status.	Total.	Exam and Admitted.	Other Expos.	Prefigured Status.	Total.	Exam and Admitted.	Other Expos.	Prefigured Status.	Total.	Exam and Admitted.	Other Expos.	Prefigured Status.	Total.	Exam and Admitted.	Other Expos.	Prefigured Status.	Total.	Exam and Admitted.	Other Expos.	Prefigured Status.	Total.	Exam and Admitted.	Other Expos.	Prefigured Status.	Total.	Exam and Admitted.	Other Expos.	Prefigured Status.	Total.												
M. Harding as Deputary Register	Disease untreated	M. F.	19 17	1 1	3 4	24 29	4 6	8 8	1 1	1 1	4 6	3 1	4 1	1 1	2 3	3 4	11 7	1 1	1 1	5 3	10 9	1 1	1 1	12 11	3 3	4 3	16 9	8 8	3 3	25 5	4 4	7 7	1 1	3 3	2 2	13 9	3 3	3 3	5 5	2 2	13 9								
	Children.	M. F.	25 2	2 2	7 3	30 15	3 3	5 5	14 17	1 1	1 1	22 5	12 2	3 1	6 3	36 10	32 17	3 3	32 8	13 8	2 2	20 12	62 6	4 4	107 14	9 9	5 5	66 16	4 4	7 7	1 1	40 10	3 3	1 1	7 7	16 10	2 2	16 10											
	Disease not attended.	M. F.	8 2	2 5	2 3	11 8	1 2	1 5	1 6	1 1	1 2	6 6	1 1	2 4	1 1	3 5	10 9	2 2	4 5	1 1	12 5	4 2	5 2	12 13	1 1	2 2	5 4	14 16	2 2	5 5	14 16	2 2	3 3	12 12	4 4	6 6	3 3	12 12											
	Children.	M. F.	19 6	4 2	4 2	27 6	5 3	5 3	1 1	11 6	3 3	9 6	6 5	27 8	7 7	15 13	1 1	18 16	34 16	5 5	18 20	34 16	5 5	18 20	34 16	5 5	18 20	34 16	5 5	18 20	34 16	5 5	18 20	34 16	5 5	18 20	34 16	5 5	18 20										
	Condition not attended during the year	M. F.	2 1	2 5	5 5	7 10	1 6	1 1	1 1	2 2	1 1	2 2	1 1	2 2	1 1	2 2	1 1	2 2	1 1	2 2	1 1	2 2	1 1	2 2	1 1	2 2	1 1	2 2	1 1	2 2	1 1	2 2	1 1	2 2	1 1	2 2	1 1	2 2											
M. Harding as Deputary Register	Total on Deputary Register at last Decembar	M. F.	87 5	25 19	137 127	22 2	9 9	41 27	7 6	12 10	56 19	4 1	25 40	21 21	13 20	92 30	45 45	4 4	51 123	11 19	8 20	121 66	15 15	120 120	255 47	39 39	15 15	156 156	31 31	20 20	139 139	25 25	10 10	41 41	130 130	10 10	130 130												
	Transferred to Pulmonary	M. F.	77 23	1 4	1 2	78 29	1 4	1 4	80 33	1 1	5 19	81 3	1 3	82 22	9 9	1 4	90 26	8 8	1 1	91 9	1 1	2 2	93 11	1 1	2 2	94 9	1 1	1 1	95 9	1 1	1 1	96 9	1 1	1 1	97 9	1 1	1 1	98 9											
M. Harding as Deputary Register	Discharged as recovered.	M. F.	77 23	9 4	25 40	6 4	1 4	33 44	1 4	5 19	38 23	1 3	39 22	9 9	1 4	40 26	8 8	1 1	41 9	1 1	2 2	43 11	1 1	2 2	44 9	1 1	1 1	45 9	1 1	1 1	46 9	1 1	1 1	47 9	1 1	1 1	48 9												
	Children.	M. F.	94 22	22 118	256 19	6 3	60 20	14 34	1 49	65 56	3 5	27 50	6 11	3 39	45 4	4 4	20 44	3 3	7 14	1 1	8 5	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —													
	Lost sight of or otherwise referred from Deputary Register	M. F.	273 31	161 3	218 24	106 41	27 141	206 88	20 14	33 107	88 33	21 88	88 33	21 88	192 33	16 16	163 33	16 16	163 33	16 16	163 33	16 16	163 33	16 16	163 33	16 16	163 33	16 16	163 33	16 16	163 33	16 16	163 33	16 16	163 33	16 16	163 33	16 16	163 33										
	Children.	M. F.	21 31	3 3	6 19	9 4	27 1	33 2	3 1	1 1	3 3	3 3	1 1	4 2	3 3	1 1	4 2	3 3	1 1	4 2	3 3	1 1	4 2	3 3	1 1	4 2	3 3	1 1	4 2	3 3	1 1	4 2	3 3	1 1	4 2	3 3	1 1	4 2											
	Total within of Deputary Register	M. F.	471 138	143 169	286 134	120 144	65 36	37 313	458 114	43 17	317 303	85 45	53 120	340 64	63 63	33 133	503 64	54 54	63 63	343 105	60 60	33 37	374 104	61 61	83 83	127 127	305 305	64 64	29 29	380 380	65 65	44 44	29 29	168 168	244 244	31 31	29 29	168 168	244 244										
M. Harding as Deputary Register	GRAND TOTALS OF (a) AND (b) INCLUDING Those Transferred to Pulmonary	M. F.	1058 309	369 549	435 1345	168 168	88 44	421 101	515 35	58 150	261 104	50 36	338 372	80 80	54 63	343 205	60 60	54 54	343 105	60 60	37 37	374 104	61 61	83 83	127 127	305 305	64 64	29 29	380 380	65 65	44 44	29 29	168 168	244 244	31 31	29 29	168 168	244 244											
	Children.	M. F.	1058 309	369 549	435 1345	168 168	88 44	421 101	515 35	58 150	261 104	50 36	338 372	80 80	54 63	343 205	60 60	54 54	343 105	60 60	37 37	374 104	61 61	83 83	127 127	305 305	64 64	29 29	380 380	65 65	44 44	29 29	168 168	244 244	31 31	29 29	168 168	244 244											

PART III.

MATERNITY AND CHILD WELFARE ACT, 1918.
NOTIFICATION OF BIRTHS ACTS, 1907 & 1915.

(1) COUNTY AREA. The County Council was responsible during the year 1935 for administering the above Acts in the undermentioned 32 Sanitary Districts.

The information in the following table is obtained from (a) the births actually notified to the County Health Department, (b) particulars of unnotified births furnished by the local Registrars of Births and Deaths, (c) notifications of Puerperal Fever as given by the Registrar-General and (d) copy notifications of Ophthalmia Neonatorum received from Medical Officers of Health :—

TABLE XX.

Sanitary Districts.	Estimated Population, 1935.	No. of Births notified by		No. of Births Unnotified.	No. of Notifications of	
		Mid-wives.	Doctors and Parents.		Puerperal Fever.	Ophthalmia Neonatorum.
Malden B. ...	8,910	22	57	3	1	...
Saffron Walden B. ...	6,229	27	15	9	1	...
Benfleet U. ...	14,160	79	38	7	1	1
Billericay U. ...	28,910	277	195	1	4	1
Braintree & Bocking U. ...	14,080	86	97	11	...	...
Brentwood U. ...	25,880	100	89	11	1	...
Brightlingsea U. ...	4,142	...	46	...	...	...
Burnham-on-Crouch U. ...	3,487	29	10	1	...	...
Canvey Island U. ...	5,584	29	9	...	...	1
Chigwell U. ...	19,460	115	78	9	2	...
Chingford U. ...	29,690	126	184	38	2	1
Epping U. ...	5,446	51	40	3	...	...
Frinton & Walton U. ...	7,088	20	33	2	...	...
Halstead U. ...	5,855	42	35	4	...	...
Hornchurch U. ...	59,910	339	479	16	6	2
Purfleet U. ...	8,842	106	50	2	...	...
Rayleigh U. ...	7,232	56	25	3	...	...
Waltham Holy Cross U. ...	6,969	32	49	1	...	2
West Mersea U. ...	2,289	2	25	...	...	1
Witham U. ...	7,025	66	29	...	...	...
Wivenhoe U. ...	2,182	4	10	...	...	...
Braintree R. ...	15,790	111	70	6	1	1
Chelmsford R. ...	30,480	268	126	10	2	...
Dunmow R. ...	16,170	124	81	7	...	...
Epping R. ...	14,510	73	56	6	...	...
Halstead R. ...	15,790	86	81	8	1	...
Lexden & Winstree R. ...	19,820	105	110	8	3	...
Malden R. ...	13,640	125	85	17	...	...
Ongar R. ...	12,690	96	118	2	...	1
Rochford R. ...	15,770	102	377	5	2	1
Saffron Walden R. ...	15,400	95	73	6	...	...
Tendring R. ...	22,350	284	108	8	...	...
Totals ...	465,780	3,071	2,883	204	27	12

The Essex Review Order, 1935, under which the new Thurrock Urban District is created, operates from 1st April, 1936, and on that date the powers under the above Acts in the present Purfleet Urban District will be transferred from the County Council to the Thurrock Urban District Council.

(2) MEDICAL STAFF. Particulars in regard to the Medical Staff are given on page 9.

(3) HEALTH VISITORS. There were no additional Health Visitors appointed for Maternity and Child Welfare work during the year 1935.

Facilities were granted to a District Nurse-Midwife to train for the new Health Visitors' Certificate by appointing her as a probationer Health Visitor under the Council's scheme.

On 31st December, 1935, the Health Visiting Staff undertaking Child Welfare work on behalf of the County Council numbered as follows :—

Whole-time (also undertaking School and Tuberculosis duties)	..	..	..	40	} Equivalent whole-time H.V. for C.W. = $18\frac{1}{2}$ (approx.)
Whole-time (part-time C.C. and part-time L.A.)	..	..	..	2	
Part-time	..	..	..	2	

N.B.—The above figures do not include the Chief Health Nurse and her Assistant, but include the Probationer Health Visitors.

The District Nurse-Midwives continued to assist the Health Visitors as far as possible.

(4) ANTE-NATAL CLINICS AND CHILD WELFARE CENTRES. At the end of the year 1935, there were 20 Ante-Natal Clinics and 104 Child Welfare Centres, not including Weighing Centres, in the County Child Welfare Area. During the year Ante-Natal Clinics were established at Great Wakering, Ongar and Burnham-on-Crouch. Child Welfare Centres were established at Leaden Roding, Wivenhoe (from Weighing Centres) Great Tey, Chigwell, Stondon Massey and Roydon. In addition, a number of Weighing Centres were also established.

The problem of the supervision of toddlers was carefully considered during the year and the Child Welfare Medical Officers and Health Visitors were instructed to institute the following scheme as far as possible in their areas :—

(a) Toddlers should be seen and examined by the Child Welfare Medical Officer at least once a year.

(b) Efforts to bring the toddlers to the Centres should in the first instance be directed towards the older age group—4—5 years (those who will soon be going on to school) and work downwards (age 3—4 and so on).

(c) Where a Centre operates weekly or fortnightly it is suggested that the first session in each month should be the session for concentrating on the toddlers, and in consequence toddlers attending on these sessions should be given precedence over the other babies.

(d) Where a Centre operates only monthly it will be sufficient if this concentration of toddlers is arranged at one session every three months, say the first session in a quarter and again that the toddlers should be given precedence over the other babies.

(e) It is strongly urged that the Health Visitors and also probably the District Nurses shall endeavour to get to the Centres those toddlers who have never attended, and those toddlers who have ceased attending since they were 12 to 18 months of age.

(f) The method of arranging these attendances should be by a personal invitation on the special Form C.W. 51 provided. This should be left at the home of the toddler by the Health Visitor or District Nurse when she makes her visit.

(g) It is realised that in some rural areas the chief difficulty will be the distance such toddlers might have to travel to the nearest Child Welfare Centre. In such instances, should a Health Visitor or District Nurse find any toddler suffering from any abnormality, she should acquaint the Child Welfare Medical Officer in her district of the facts. The Child Welfare Medical Officer could then either make a personal visit to see the child, or suggest some line of action.

(In really necessitous cases some assistance towards the travelling expenses can be afforded, if the family circumstances are submitted to the County Medical Officer).

In January, 1935, a Women's Welfare Clinic was established at Hornchurch, at which Post-Natal Patients, patients in need of Birth Control advice and patients suffering from Gynæcological conditions are seen. At the time of writing, other Women's Welfare Clinics are being established details of which will be given in the next Annual Report.

On the 31st October, 1935, the 3rd Annual Conference was held of representatives from each of the Voluntary Committees of Child Welfare Centres. Mrs. C. B. Alderton, J.P., the Vice-Chairman of the Maternity and Child Welfare Sub-Committee presided, and Dr. Miller Wood spoke on the subject of the health and welfare of the pre-school child. An excellent and useful discussion followed on all branches of the maternity and child welfare scheme.

The services of the Domestic Science Teacher, Mrs. B. G. Richardson, were continued throughout the year, her course of lessons being given at the undermentioned Child Welfare Centres :—

Brentwood.	Maldon.	Saffron Walden.
Hornchurch.	Pitsea.	Hadleigh.
Chingford.	Waltham Abbey.	Thundersley.
Laindon.	South Benfleet.	Burnham-on-Crouch.

The course consists of a series of ten lessons at each Centre, giving useful information to mothers regarding the different classes of food necessary to build up, warm and protect the body and also giving general rules for the kitchen, &c.

I am indebted to Mrs. Richardson for the following observations concerning her attendance at the Centres during the year :—

The teaching of Nutrition and Practical Cookery has continued during the past year at the Centres named on page 99.

As most of the lectures have been given on the usual Welfare days, the attendance has been (with two exceptions—Waltham Abbey and Harold Wood) most satisfactory.

The popularity of the "Notes of Lessons" supplied and the request for extra copies for mothers unavoidably absent, are very encouraging features of the work.

Another most satisfactory observation is the popularity of the vegetarian and cheese dishes and reports of satisfaction given at home by the use of these cheap nourishing foods.

Portable dinners and their preparation have also been very popular.

The stoves supplied in every case have given complete satisfaction, but it has been an added pleasure at Vange to use a very cheap oil cooker and oven within the means of every mother.

In addition to these lectures, short demonstrations have been given at three Health Exhibitions:—Great Bardfield, Foulness Island and Dedham. In every case the demonstrator appreciated the interest and apparent enjoyment of the audience very much indeed.

The work has continued to be most enjoyable to the Lecturer and the splendid co-operation of the Health Visitors, District Nurses, members of the Committee and the Caretakers has added considerably to the pleasure of the work.

Miss I. Campbell, the Demonstrator of the National Milk Publicity Council, continued to give demonstrations at Child Welfare Centres, showing the mothers the various methods of using and preparing milk in dietary. She has rendered excellent service in this direction.

(5) COMBINED TREATMENT CENTRES. Reference is made to Combined Treatment Centres on page 114 of this Report.

(6) PROVISION OF MILK AND MEDICAMENTS. The two schemes for (a) the provision of wet milk and (b) medicaments through local chemists outlined in previous reports, were continued. Commencing October, 1935, the schemes were amended to enable milk to be supplied at less than cost price in necessitous cases to infants up to the age of three years, without special permission having to be obtained from the County Medical Officer as before.

(7) DENTAL TREATMENT AND DENTURES. The scheme, as outlined in previous reports, was continued.

During the year under review a total of 628 patients were treated at a cost to the Council of £907 1s. 10d., of which £355 5s. 0d. was recovered from patients as contributions.

(8) **HOME HELPS.** Thirty-eight applications were received during the year as follows :—Aldham (1), Braintree (2), Broxton (1), Bures (1), Earls Colne (1), East Hanningfield (1), Hatfield Peverel (1), Heybridge (1), Hornchurch (1), Laindon (6), Little Bardfield (1), Little Saling (1), Maldon (4), Pitsea (3), Rivenhall and Silver End (2), Shalford (1), Sible Hedingham (2), South Woodham (1), Stebbing (1), Thaxted (2), Toppesfield (1), Wethersfield (1), Witham (1), Wix (1). This is a considerable increase on the number of applications obtained in the year 1934.

At the time of writing, the following revised scheme has been approved by the County Council and the Ministry of Health.

“ The existing Scheme for the provision of home helps has been in operation since 1st April, 1931, but for various reasons has not been entirely successful. Profiting by the experience gained in its operation, the following amended scheme has been evolved and it is hoped that the Sub-Committee will give their general approval to the broad outlines delineated below :—

(1) *Outline of Scheme.*

Suitable candidates would be between 30 and 50 years of age, of respectable character and having had reasonable domestic experience. When candidates are interviewed, particular attention would be paid to temperamental suitability for this type of work as it will be readily appreciated that this factor is likely to be a very important one in the promotion, success and general popularity of the scheme.

Primarily six to twelve women would be selected from one area. These would be given a short course of training during which period it would be possible for the Instructors to make a further assessment of their capabilities as Home Helps.

(2) *Training.*

Lectures would be given as follows :—

Cookery, housewifery, laundry	8
Care and management of older children ..	2
Relation of home helps to doctors and midwives	2

As far as possible these lectures would be given by members of the County Council's staff.

(3) *Duties.*

The Home Help is simply to carry out domestic duties and she must not in any way interfere with the instructions of the doctor, nurse, or midwife.

(a) She should as and when needed, carry out the following services for the mother :—

- (i) Feeding the mother and giving her the bed pan.
- (ii) Keep the mother's room clean.
- (iii) Change the infant's napkins, &c.
- (b) Do any household work which would ordinarily be done by the mother.
- (c) Have the care of the other children and prepare them for school.
- (d) Cook and serve meals for the family.
- (e) Do the necessary cleansing and scrubbing of the house.
- (f) Wash and mend a reasonable amount of clothing and bedding.
- (g) Remain all night with the patient if this is considered necessary by the medical attendant.
- (h) Maintain absolute cleanliness in regard to her own clothing and person.
- (i) Report any grievance or difference at once to the Health Visitor.

The Health Visitor of the district would be responsible for the general supervision of home helps and when necessary the local Child Welfare Medical Officer would also be consulted. She would also maintain a register of the home helps and their periods of duty.

(4) *Remuneration.*

On the inauguration of the scheme it is probable the employment of home helps may for some time be irregular and, therefore, the following is suggested :—

- (i) As a retaining fee—4/- per week.
- (ii) When at work, in addition to the retaining fee, a wage of 3/- per day, plus 1/- per day for meals, should these not be taken with the family for whom she is caring, together with reasonable travelling expenses.

Hours of duty would ordinarily be from 8 a.m. to 6 p.m.

(5) *Cost.*

Patients would be expected to contribute towards the cost of home helps in accordance with their means, but it is not proposed that any arbitrary scale should at present be adopted. Primarily it is suggested as stated above, that these proposals will be put into operation in one area of the County. When experience has been gained of the working of such a scheme, suitable modifications or additions can be made with a view to it being adopted for general use in other areas.

(9) TRAVELLING EXPENSES OF MOTHERS ATTENDING CHILD WELFARE CENTRES.

At the end of the year 1935 thirty-five Child Welfare Centres were participating in the scheme, namely :—Bardfield, Bocking, Burnham-on-Crouch, Cold Norton and Purleigh, Danbury, Debden and Wimbish, Dunmow, East Hanningfield, Eastons, Epping, Felsted, Fordham, Harlow, High Easter, Great Horkesley, Laindon, Leaden Roding, Ongar, Rivenhall and Silver End, Rochford, Stansted, Stebbing, Stock, Stondon Massey, Takeley, Terling, Great Tey, Thaxted, Tillingham, Tollesbury, Great Wakering, Little Waltham, Wethersfield, Woodham Ferrers and Great Yeldham.

(10) PUBLIC HEALTH (NOTIFICATION OF PUERPERAL FEVER AND PUERPERAL PYREXIA) REGULATIONS, 1926. During the year ended 31st December, 1935, copies of notifications made by medical practitioners were received from Medical Officers of Health in the Administrative County and the County Child Welfare Area as follows :—

	Administrative County.				C.C. Child Welfare Area.			
	1932.	1933.	1934.	1935.	1932.	1933.	1934.	1935.
Puerperal Fever ..	58	50	61	62	20	23	20	27
Puerperal Pyrexia ..	123	150	149	144	37	50	42	37

(See also page 108).

(i) *Obstetric Specialists.* The services referred to in the previous year's report were continued.

Mr. W. S. O'Loughlin, M.C.O.G., in addition to attending at the Ante-Natal Clinic, Oldchurch Hospital, Romford, was called in to eleven patients in various parts of the county.

(ii) *Institutional Treatment.* During the year 1935, twenty-six patients suffering from puerperal fever or puerperal pyrexia were admitted to Hospitals and Institutions under the Public Health Committee's arrangement at a cost of £355 1s. 6d., the amount recovered from patients being £58 11s. 2d.

(iii) *Puerperal Fever Units at St. John's Hospital, Chelmsford, and Oldchurch Hospital, Romford.* The valuable work carried out by these two special units, which was mentioned in the report for 1931, has been continued and full advantage of the facilities has been taken by the Public Health Committee, as well as by certain autonomous child welfare authorities in the County. Details of the work carried out have been received and the following is a brief summary thereof :—

Institution.	No. of patients admitted.	Duration of Stay.					Discharged.
		0-7	8-14	15-21	22-28	Over 28 days.	
Chelmsford ...	28	3	9	7	2	7	24
Romford ...	25	0	3	7	4	11	25

(iv) *Skilled Nursing.* The arrangements were continued with the Essex County Nursing Association for the provision of skilled nursing in the homes of patients when the circumstances render the removal of the patient to hospital difficult or impossible.

(v) *Bacteriological Examinations of (a) lochia, (b) blood.* Facilities for these examinations were available under the County Laboratory Scheme.

Arrangements were also made for Dr. F. E. Camps, Pathologist at the Chelmsford & Essex Voluntary Hospital, to carry out special Hæmolysis tests—see also page 18.

These tests included a special serological typing which has proved of great value in determining earlier diagnosis of puerperal sepsis from cervical swabs, control of midwives, and in tracing the source of infection. These arrangements are being continued and extended during the ensuing year.

(11) PUBLIC HEALTH (OPHTHALMIA NEONATORUM) REGULATIONS, 1926. The arrangements made under these Regulations were fully set out in the Report for the year 1927.

During the year ended 31st December, 1935, copies of 59 notifications of Ophthalmia Neonatorum, made by medical practitioners to Medical Officers of Health in the Administrative County, were received.

Twelve of the above notifications relate to patients living in the County Child Welfare Area, and the following particulars of these patients have been obtained :—

Treated		Vision		Vision		Total		Deaths.
At Home.	In Hospital.	Unimpaired.		Impaired.		Blindness.		
R.	L.	R.	L.	R.	L.	R.	L.	
7	.. 5	.. 11	.. 11	1	.. 1	—	.. —	.. —

Two patients were admitted to Hospital during the year under the County Council's arrangement for the treatment of this disease, with satisfactory results.

(12) HOSPITAL TREATMENT FOR MATERNITY PATIENTS. The arrangements with certain hospitals for the admission of the following types of maternity patients were continued :—

- (a) Complicated or difficult cases of confinement where hospital treatment is essential.
- (b) Cases of confinement where, in the opinion of the Medical Attendant, the patient cannot with safety be confined in her own home.

During the year three hundred and twelve patients were admitted under the above schemes at a cost of £2,584 6s. 3d., the amount recovered from patients being £889 16s. 0d.

(13) CONVALESCENT TREATMENT—MOTHERS AND CHILDREN. Under the arrangements with the Mabel Greville Home, Walton-on-the-Naze, referred to in the previous year's report, six children were admitted under the Child Welfare Scheme.

It has not yet been possible to make suitable provision for convalescent treatment of both mothers and babies.

The offer of a large house at Staplehurst, Kent, to the Association of Maternity and Child Welfare Centres for use as a Convalescent Home, referred to in the report for the year 1934 has since fallen through.

(14) **TREATMENT OF MINOR AILMENTS—CHILDREN UNDER SCHOOL AGE.** The scheme was continued and 41 children under school age received operative treatment during the year.

(15) **TREATMENT OF ORTHOPAEDIC PATIENTS.** Full details of the scheme for the treatment of orthopaedic patients adopted by the Public Health and Education Committees were given in the Annual Report for 1927.

As far as children of school age are concerned, these are dealt with in the School Medical Officer's Annual Report, so that the following information relates to children under school age in the County Council's Child Welfare Area :—

(a) *Number of Cases on Books.* At the end of 1935 there were approximately 357 Child Welfare patients requiring treatment, supervision or observation.

(b) *Ascertainment and Re-examination Clinics.* During 1935 Mr. Whitchurch Howell attended 63 clinic sessions for the County Council and carried out 374 examinations of County patients under school age.

(c) *Hospital Treatment.* The following figures show the position regarding institutional treatment on 1st January, 1935, as compared with that on 1st January, 1936 :—

	Child Welfare Patients recommended and accepted by Committee for Hospital treatment.		Being investigated.	No. in Hospital under the County Scheme.	
1st January, 1935	..	5	..	4	.. 3
1st January, 1936	..	6	..	3	.. 4

During the year 14 patients completed hospital treatment and 17 patients were admitted into hospital.

(d) *Orthopaedic After-Treatment Clinics.* The Orthopaedic After-Treatment Clinics were continued during the year and 1,206 attendances of children under school age were made.

NURSING HOMES REGISTRATION ACT, 1927.

A detailed report was given in the 1928 Report of the provisions under the Act and the procedure adopted by the County Council. Regulations subsequently adopted have been referred to in previous reports.

The number of Registered Homes at the end of the year was as follows :—

(a) Maternity Homes only	..	..	..	21
(b) Maternity and Nursing Homes	..	..	..	20
(c) Nursing Homes (including Convalescent Homes)	..	..	..	9

The additional Bye-laws referred to in the previous year's report were approved by the Ministry of Health on 28th February, 1936, and came into operation on 1st April, 1936. They include the following :—

A person carrying on a Nursing Home in respect of which he is for the time being registered by the Council, shall—

- (a) Within a period of twenty-four hours of infectious disease occurring in such Home give notice of the occurrence to the County Medical Officer of Health ;
- (b) Notify forthwith to the County Medical Officer of Health a rise in the temperature of any maternity patient to 100.4° Fahrenheit for twenty-four hours, or its recurrence within that period ;
- (c) Make arrangements for the isolation of any patient in the Home suffering or suspected to be suffering from infectious disease.

The routine inspections of the Nursing Homes have been carried out at regular intervals. An opportunity has also been taken at these visits of inspecting those midwives residing in Nursing Homes who have notified their intention to practise.

In the majority of the Homes the general standard of efficiency is very satisfactory.

CHILDREN AND YOUNG PERSONS ACTS, 1908-1932.

Infant Life Protection.

All the Health Visitors in the County Child Welfare Area are appointed Infant Life Protection Visitors and make visits of inspection at intervals of at least once a quarter to each foster-mother and child registered.

At the end of the year there were 670 registered foster-children in the care of 420 foster-mothers.

It was not necessary to obtain any Orders during the year for the removal of children from foster-parents under Section 67 of the Act of 1932.

MIDWIVES ACTS, 1902-1926.

(a) GENERAL. (i) On 1st October, 1935, the Central Midwives Board further revised the rules in one or two instances, including the rule regarding midwives preparing the dead for burial, which now reads :—

“ A midwife shall not lay out a dead body except in the case of a patient upon whom she has been in attendance at the time of death in the capacity of midwife or nurse.”

(ii) In 1935 the Report of the Joint Council of Midwifery was published, in which various recommendations were made for improving and re-organising the midwifery services and establishing a salaried midwives service. This report has received the consideration of the Ministry of Health, Local Authorities, and other interested Bodies, and at the time of writing a new Midwives Bill is being placed before Parliament.

The main features of the Bill are to provide for :—

- (a) Adequate service of salaried midwives.
- (b) Compensation for midwives who retire or are left out of the new service.
- (c) Prohibition of maternity nursing by unqualified persons.
- (d) Arrangements for post-graduate courses of instruction for all practising midwives.

The Local Supervising Authority is required to secure the whole-time employment of a sufficient number of salaried midwives for attendance on women in their own homes as midwives or maternity nurses. This may be done either by employing whole-time salaried midwives or securing their employment by voluntary organisations, *e.g.*, District Nursing Associations or by other Welfare Authorities.

Further details of the provisions when the Bill becomes law will be given in the Annual Report for the year 1936.

(iii) As indicated in the previous year's report, the Barking Borough Council became the Local Supervising Authority in that area as and from 1st April, 1935.

(b) PRACTISING MIDWIVES. During the year under review 349 midwives notified their intention to practise in the Administrative County, excluding the Barking, Colchester, Ilford, Leyton and Walthamstow Midwives. Of these, 304 were actually in practice at the end of the year 1935. These midwives are classified as follows :—

Total No. of Midwives in practice at end of year.	Trained.		L.O.S. Certificated.			
	Dep.	Indep.	Dep.	Indep.	<i>Bona fide.</i>	
304 ..	180 ..	117 ..	1 ..	5 ..	1	

The total number of live births and still births which occurred during the year 1935 in the Administrative County, excluding Barking, Colchester, Ilford, Leyton and Walthamstow Boroughs, was 12,052, and of these, 4,868 (40.4 per cent.) were attended by midwives in the capacity of a midwife, and 2,978 (24.7 per cent.) as maternity nurses under the supervision of medical practitioners.

Each midwife was asked to state the number of confinement cases which she attended as a midwife during the year 1935, and it was found that 154 trained and 5 *bona fide* midwives attended 10 or less cases each, 59 trained attended 11-20 cases each, 55 trained and 2 *bona fide* attended 21-40 cases each, 16 trained attended 41-60 cases each, and 13 trained attended 61-100 cases each.

On 1st January, 1936, Miss H. Threadkell was appointed as a Midwife at a fixed salary, for the Loughton Area, owing to the fact that a maternity home in the district closed, and efforts to arrange for the local district nursing associations to provide the necessary midwifery service failed.

(c) **HANDYWOMEN.** It was not found necessary during the year to caution any uncertified persons for attending cases of confinement without being under the direction and personal supervision of a registered medical practitioner.

(d) **NOTIFICATIONS.** The following list shows the number of notifications received from certified midwives in accordance with the rules of the Central Midwives Board during the year as compared with the previous four years :—

	1931.	1932.	1933.	1934.	1935.
Records of Medical Aid ..	2006	2036	2025	2089	1898
Records of Still-Births ..	103	96	101	102	85
Deaths of Mothers ..	4	5	2	1	2
Deaths of Infants ..	78	66	76	73	55
Artificial Feeding ..	54	54	61	77	66
Liability to be a source of Infection	*281	*251	*209	*277	*265
Laying-out for Burial ..	258	261	293	260	†78
Ophthalmia Neonatorum or Dis-					
charging Eyes ..	237	237	243	‡199	‡102

*This figure includes all cases of high temperature.

†The large decrease in this number as compared with previous years is the result of the revised Rules of the Central Midwives Board on this subject referred to in the previous year's report.

‡Includes 15 cases notified as Ophthalmia Neonatorum.

Puerperal Fever, Puerperal Pyrexia and Ophthalmia Neonatorum.

Special investigations were made into all cases of high temperature of mother and discharging eyes of infant in a midwife's practice. The results of these investigations showed that during 1935 in one case of high temperature the rules of the Central Midwives Board were not properly carried out. A warning letter was sent to the midwife concerned.

Pemphigus Neonatorum.

All suspected cases of Pemphigus Neonatorum occurring in a midwife's practice are investigated to ensure that every possible precaution is taken to prevent a spread of the disease.

Enquiries were made into 27 suspected or actual cases occurring in Billericay (2), Brentwood (1), Chelmsford (1), Chingford (1), Dagenham (13), Grays (1), Hornechurch (1), Ongar (1), Purfleet (3), Saffron Walden R. (2) and Tilbury (1).

Inspection Visits.

Thirteen hundred and eighty-one routine visits were made to midwives during the year, and of these 282 were undertaken by Assistant County Medical Officers and 1,099 by the Chief Health Nurse and her Assistant, and the Relief Health Visitor.

Written cautions were sent to 4 midwives for minor infringements of the rules other than those referred to in the paragraphs relating to Puerperal Fever, Ophthalmia Neonatorum and Pemphigus Neonatorum above.

Doctors' Fees.

In accordance with Section 14 of the Midwives Act, 1918, during the year ended 31st December, 1935, the County Council paid the sum of £2,147 15s. 6d. as fees to medical practitioners and recovered from patients during the year the sum of £766 1s. 6d.

The following comparative table is of interest, showing (a) the number of medical aid notices received from midwives during the past five years, and (b) the corresponding number of doctors' claims made against the County Council in respect of such notices. This table shows that the percentage of confinements in which medical aid is sought is still increasing :—

Year.	No. of Medical Aid Notices received from Midwives.	Percentage of Confinements attended by Midwives in which medical aid was sought.	No. of Medical Aid Notices for which Doctors' claims have been received.	Total amounts of claims.			Amounts recovered from patients.		
				£	s.	d.	£	s.	d.
1931 ..	2006	.. 33.8	.. 1495	.. 2,106	15	6	.. 644	3	3
1932 ..	2036	.. 34.0	.. 1564	.. 2,285	11	9	.. 593	15	9
1933 ..	2025	.. 34.9	.. 1575	.. 2,527	12	6	.. 625	9	1
1934 ..	2089	.. 36.4	.. 1628	.. 2,174	15	6	.. 800	13	6
1935 ..	1898	.. 38.9	.. 1514	.. 2,147	15	6	.. 766	1	6

Lectures.

The Essex Midwives Association arranged a special course of Lectures in Chelmsford which was held in May and June.

Dr. Mary Blair gave lectures entitled "Toxæmias of Pregnancy (Urine Testing)," "Care of the Infant," "Abnormal Presentations" and "Abortions."

The lectures were greatly appreciated by the 75 midwives who attended the Course. The County Council assisted the Association by a grant towards the lecturer's fees, travelling expenses, &c.

Essex County Nursing Association.

(a) GENERAL. For the year 1935 the sum of £9,596 3s. 9d. was paid by the County Council to the County Nursing Association in accordance with the agreement.

(b) DISTRICT NURSING ASSOCIATIONS. At the end of 1935 the number of District Nursing Associations in the Administrative County which were affiliated to the County Nursing Association and which employed 191 Nurses, was as follows :—

No. of affiliated D.N. Associations.	No. undertaking Midwifery and District Nursing.	No. performing Maternity and District Nursing duties only.
155	.. 150	.. 5 (2 of which undertake general nursing only).

District Nurses belonging to affiliated Associations during the year 1935 made the following visits :—Midwifery 37,526, Maternity 28,809, District General 212,829, District Tuberculosis 1,788, Health Visiting—Pre-natal 26,837, Post-natal 37, 263, and Home Visits (School children) 7,955.

Of the 155 affiliated Associations, 149 participate in the County Council's Combined Nursing Scheme.

(d) PARISHES SERVED—

Number in the County (excluding extra-Metropolitan area) ..	377
Number served by affiliated District Nursing Associations ..	352

GENERAL.

(a) Maternal Mortality.

Details were given in the previous year's report of the County Medical Officer's recommendations for improving and developing the maternity services in consequence of the Circular 1433, dated 10th October, 1934, issued by the Ministry of Health. In June, 1935, the Ministry made enquiries as to the action taken regarding these recommendations, and details were given of the developments which had taken place or were contemplated. These included increased ante-natal and midwifery services, the appointment of W. S. O'Loughlin, Esq., M.C.O.G., from 1st April, 1935, as Consulting Gynæcologist and Obstetrician, and the proposed extension of the Provision of Milk and Home Helps Schemes already referred to in this report.

During 1935 the maternal death-rate per 1,000 births in the Administrative County was 3.95, compared with 4.95 in 1934.

(b) Birth Control.

Reference is made on page 99 of this report to the establishment of " Women's Welfare Clinics " at which mothers are seen after confinement and examined for post-natal conditions and birth control advice is given in accordance with the various circulars issued by the Ministry of Health.

Early in the year under review the Council agreed that in necessitous cases birth control appliances be provided free of cost or at half-price, according to a scale fixed for determining necessity.

On the 9th November, 1935, a member of the Maternity and Child Welfare Subcommittee accompanied by Dr. Annie Gardiner and Dr. Miller Wood, attended the National Birth Control Conference, and as a result the following report was submitted :—

" The Committee will remember that at the last meeting, Dr. Miller Wood gave the impressions he had gathered at the National Birth Control Conference held on the 9th November, 1935, attended by Mrs. Custerson, Dr. Annie Gardiner and himself, which might be conveniently summarised as follows :—

- (1) Birth Control has a definite role to play in preventive medicine.
- (2) Many women who are physically unfit are approaching childbearing owing to complete ignorance on their part as to how to space or control pregnancy.
- (3) Essex has so far only touched the fringe of this necessary and valuable work.
- (4) Further Birth Control Clinics should be established in accordance with the Ministry of Health's Regulations in those parts of the County where they are most needed.

- (5) Posters to be displayed in Child Welfare Centres and other places, giving brief details of the Scheme and where these Clinics are situated.
- (6) Birth Control advice is capable of doing a great deal towards combating the morbidity rates of childbirth, of which there is far more than many people realise, and also even perhaps maternal mortality itself.

The Committee desired that further opportunities for giving Birth Control advice should be arranged in accordance with the Ministry of Health circulars. Dr. Annie Gardiner holds such a Clinic under the title of Women's Welfare Clinic, at the Hornchurch Combined Treatment Centre on one evening fortnightly. The Grays District Council have also established a Women's Welfare Clinic in their district. There are also similar Clinics at Dagenham and Walthamstow. Presumably some private practitioners give contraceptive advice to their patients.

It is suggested as a commencement that further Women's Welfare Clinics be established at the following places where women could receive post-natal advice and also whereat suitable patients might receive instruction in contraception, as obviously that is one of the most suitable times at which such instruction could be given. The further advantage is that it is done less obtrusively than by the establishment of an *ad hoc* Birth Control Clinic :—

Laindon, to serve Billericay, Pitsea and Vange area.

Braintree, to serve Braintree and Dunmow areas.

Chingford, to serve Chingford, Epping, Waltham Abbey and Chigwell.

South Benfleet, to serve Benfleet, Hadleigh, Canvey, Rayleigh, &c.

Permission is required from the Committee for arrangements to be made for the appropriate women Medical Officers on the Council's staff to receive the necessary post-graduate instruction in contraceptive methods."

Report of First Assistant C.M.O. (Dr. J. L. Miller Wood).

The First Assistant C.M.O. (Dr. J. L. Miller Wood), has furnished the following report in connection with his duties during 1935 :—

"The work of the Ante-Natal Clinics and Child Welfare Centres has shown progressive development throughout the year. The regularity of attendances has been most satisfactory, and many increases have been noted, especially at the larger Centres.

As will be noted from page 98, there were three new Ante-Natal Clinics and seven new Child Welfare Centres established during the year.

At certain Weighing Centres during the year an arrangement was made whereby a doctor attends once a quarter. This experiment has proved a great success, and has done much to improve the status and efficiency of such Centres.

The Annual Conference of Voluntary Workers at Child Welfare Centres was held in Chelmsford on the 31st October, 1935. Many important aspects of the Maternity and Child Welfare Scheme were raised and discussed, and once again it showed the great advantages to be gained by getting the Voluntary Workers together for a mutual exchange of views.

A Women's Welfare Clinic established at Hornchurch in January, 1935, was a new departure. At this Clinic advice is given on contraceptive methods and women are seen for post-natal and gynaecological conditions. The Clinic has proved successful and has now been the model and forerunner of similar Clinics at key points in the County to be established in 1936, namely, Braintree, Brentwood, Chingford, Laindon and South Benfleet.

There has been quite an appreciable increase in applications for the provision of Home Helps, no doubt largely due to a better understanding of the County Scheme.

Particular attention is now being paid to ensure a more satisfactory supervision of toddlers, and a scheme was introduced to encourage more regular attendances at the Child Welfare Centres. At the Conference of Voluntary Workers special reference was made to this subject, and there is no doubt that the help and co-operation of the Voluntary Workers is greatly assisting the success of the Scheme."

(d) Report of Chief Health Nurse.

The Chief Health Nurse (Miss D. M. Landon) has furnished the following report in connection with her duties during 1935 :—

"The year has been one of steady, if not spectacular, progress as far as the work of the Health Visitors and District Nurse-Midwives is concerned.

HEALTH VISITORS. Although I have always felt that in most cases the standard of home visiting for toddlers has been well maintained, in some places attendances at the Welfare Centres have not been satisfactory, and both Health Visitors and District Nurse-Midwives have welcomed the introduction of the new toddlers scheme (see page 98), and are working hard and enthusiastically to make it a success.

We still have some very ignorant and a few very neglectful mothers, but a large number read all that is written on health in the daily papers, and the modern Health Visitor must be prepared, not only with more advanced teaching, but tactfully to counteract health fads without crushing enthusiasm.

A fresh and much appreciated development in the educational side of the Child Welfare Centres has been Mrs. Richardson's lectures on Cookery. She is a very popular lecturer, and combines sound teaching on food values and diet with very practical and economical teaching on how to cook the various classes of food stuffs.

During the Autumn, instead of the usual large Conference, small groups of Health Visitors have met at the County Hall on Saturday mornings to discuss difficulties and make suggestions about the work. These have

proved most successful and have been quite as helpful to the Central Office staff as to the Health Visitors. These meetings were followed by conferences of similar groups for School and Tuberculosis Nurses.

DISTRICT NURSE-MIDWIVES. The year has been one of progress and new Associations have been formed in Tolleshunt D'Arcy, St. Osyth, Thundersley, Little Clacton, Pebmarsh, Alphamstone and Lamarsh, Roydon, Wivenhoe and Alresford, and others are in progress of formation. Dr. Bullough's speech at the Essex County Nursing Association's Annual Meeting at Colchester has undoubtedly been a great help in stimulating interest in some of the unnursed areas.

The Post-Graduate Lectures given by Dr. Mary Blair, and provided by the County Council, have again been much appreciated. District Nurse-Midwives from all parts of the County attended; in a large number of cases the local Associations paying expenses for their Nurses to attend. A good proportion of Health Visitors also attended, giving up their Saturday afternoons to keep up to date in midwifery work."

(e) **Miscellaneous.**

The scheme was continued whereby a midwife practising in the County Child Welfare Area is allowed compensation of 10s. 6d. in respect of each patient referred to an Ante-Natal Clinic or a Medical Practitioner where the patient is admitted to hospital as a result. Three claims were paid during the year 1935.

In the report for the year 1933 details of the scheme were given under which the County Council pay a fee of £1 1s. for the services of an Anæsthetist called in by a medical practitioner engaged for a confinement. Three claims were paid in 1935.

COMBINED MEDICAL SERVICE.

The Combined Medical Service Scheme, outlined in detail in previous reports, was continued during the year with the following alterations :—

(a) *Burnham-on-Crouch.* Owing to the appointment of Dr. E. Miles as Medical Superintendent at Oldchurch Hospital from 1st April, 1935, his place was taken as Medical Officer of Health in Burnham-on-Crouch by Dr. J. L. Miller Wood, the First Assistant County Medical Officer.

(b) *Chingford and Waltham Holy Cross.* The arrangements between these local authorities and the County Council regarding the services of Dr. L. S. Fry were revised and from 1st June, 1935, the salaries payable by the respective authorities were as follows :—

			£	s.	d.	
Chingford	..	..	..	437	10	0 per annum.
Waltham Holy Cross	..	..	..	119	0	0 per annum.
County Council	..	..	..	318	10	0 per annum.

(c) *Clacton and Frinton & Walton.* The newly constituted Urban District of Frinton & Walton agreed to appoint Dr. W. A. Milne as Medical Officer of Health from 1st April, 1935, and the arrangements in regard to salary agreed upon by the various authorities concerned were as follows, to operate from that date :—

			£	s.	d.
Clacton	..	..	..	425	0 0 per annum.
Frinton & Walton	..	..	..	120	0 0 per annum.
County Council	..	..	..	330	0 0 per annum.

(d) *Revised Scale of Salaries.* On 1st January, 1935, the County Council made the following decision :—

“ That, subject to the respective Officers rendering satisfactory service and to the concurrence of the District Councils concerned, and to their agreeing to contribute their proportion of the proposed increments, the salaries of Assistant County Medical Officers who also act as Medical Officers of Health for one or more County Districts, be increased by four triennial increments of £25, the first of such increments to date from 1st April, 1935, or from 1st April next following the completion of three years' service, whichever shall be the later, provided that the above-mentioned shall in no case increase the salary of any officer affected by this resolution to an amount in excess of £900 per annum.”

COMBINED TREATMENT CENTRES.

The following new Combined Treatment Centres were opened during the year under review :—

Hadleigh	..	..	..	7th June, 1935.
Thundersley	..	..	..	22nd July, 1935.

Other new Combined Treatment Centres are in course of preparation and will be referred to in future reports.

PART IV.

PUBLIC ASSISTANCE.

General.

The year 1935 marks the close of the first quinquennial period of the administration by the County Council of the Public Assistance services in the Administrative County. It is appropriate at the end of this five years to make a brief survey of the Public Assistance services and the Poor Law Medical work and to give some indication of the benefits which have accrued to the community by the unified control and administration which has been provided by the County Council.

The Local Government Act of 1929 marked the beginning of an epoch in English social legislation affecting the care of the poor. How tremendous and far-reaching its effects are likely to be is not fully appreciated, and in fact can probably only be understood from a close and patient study of the state and conditions of sick poor throughout the ages since mediæval times.

In retrospect is revealed the close association of the relief of pauperism with the improvement in the national health. Prior to the time of Henry VIII the care of the sick poor was very largely a concern of the religious orders, but with the dissolution of the monasteries and changing social conditions the problem very rapidly became acute and embarrassing to the Central Government. From 1485 to the close of the 17th Century the population rose from 2½ million to nearly 5 millions, and although laws had been made by the Central Government in the reign of Richard II for the relief of the poor, there was no true recognition of the responsibility of the Government towards their care until the time of Elizabeth. The chief principle of Elizabethan Poor Law was that every competent person should henceforth contribute towards the relief of the impotent poor. The brightness of this principle was to some degree dimmed by the harshness of the legislature in dealing with the poor, but this was in keeping with the general ferocity of the penal code of the period. Nevertheless, the underlying aim was established, and henceforward the State became responsible for the care of the poor and the Elizabethan Poor Law was destined to remain valid for nearly three centuries.

As the population grew and the country became urbanised, with great towns coming into existence, it became clear that the statutes of Elizabeth were no longer fitted to the new circumstances. This led to the Poor Law Amendment Act of 1834, creating new Poor Law Unions in place of the small Poor Law units of parishes. The Overseers of the Poor were replaced by Guardians and the system was controlled by a central Body of Poor Law Commissioners. Concurrently, the changes in social life were creating the necessity for new methods of local government and municipalities enjoying local autonomy were set up.

Gradually the municipalities became more powerful and began to create progressively the social services that are such a vitally essential part of life to-day. The Poor Law system with its separate administration did not correspond or co-relate with

the services provided by the autonomous local government areas and it became clear that the two systems were rendering identical services in certain health matters to two sections of the population not always clearly demarcated. Furthermore, the trend of thought led to the gradual recognition of a new and more humane treatment of the pauper, and to remove the deterrent tendency reflected in Poor Law legislation. While it is an evil thing to regard the pauper as a social outcast, it is an infinitely greater evil to regard the sick poor as sharing in this social outlawry. There can be no doubt that while the State made itself responsible for the relief of paupers, the Poor Law was largely conceived and administered in a spirit of deterrence.

The 1929 Local Government Act provided amongst other things, for the absorption of the Poor Law medical services in the Public Health service and created the underlying implication that the acceptance of medical relief was to be no longer a stigma. Progress along these lines has been retarded by the straitened financial circumstances of the country, but the distance travelled has been far, and the putting into practice of the precepts of the 1929 Act has proceeded at an admirable tempo, clearly demonstrating the efficiency and elasticity of the unique system of English Local Government.

Since the County Council became responsible for the care of the sick poor in the Administrative County, the status and efficiency of the Poor Law Medical Services have been considerably enhanced and the immense value of the central medical control has been demonstrated in the high degree of co-ordination and co-operation which has been achieved in so short a period of time.

At all the Public Assistance Institutions the accommodation and equipment for the care of the sick has been the subject of continual surveys and within the limits possible by the exigencies of building and finance the Institutions are being brought to a high degree of efficiency. The Specialist Services of the County Consultants are available for difficult cases and the Oldchurch Hospital, Romford, has become a first-class general Hospital, capable of dealing with all types of illness and may be regarded as the first of the County "base" Hospitals. By the unified administration it is now possible to achieve the economical grouping and classification of patients in the Administrative County.

The Nursing Services of the Institutions have received special attention and the "Essex Scheme" for the nursing of the chronic and infirm sick is a pioneer one in securing for this group of patients the specialised nursing care and attention that they require.

The living conditions and salaries of the nursing staff have both been the subjects of review and revision, and no effort is spared to render this branch of the nursing profession as attractive as possible.

In the domiciliary treatment of the sick poor there are now 112 District Medical Officers, and the closest co-operation is maintained between them and the Central Office of the Public Health Department. New and additional facilities, such as specialist services, have been commenced in connection with this side of the work. It has long been felt that the sick poor should have freedom in their choice of the medical practitioner rather than be forced to accept the services of the particular medical practitioner of the district appointed as the Poor Law Medical Officer. Accordingly,

since 1930, by the aid of a comprehensive record system, information has been amassed for the foundation of such a "Free Choice of Doctor Scheme," and on 1st January, 1936, it was put into operation in three Relief Areas of the County.

The Vaccination Order, 1930, provided that every County and County Borough should discharge the functions relating to vaccinations as functions relating to public health, and the work of the Public Vaccinator now comes under the administrative supervision of the C.M.O. There can be no question that the time is due for a revision of the laws relating to vaccination. Compulsion, always alien to the English temperament, should be replaced by the offer of free vaccination and re-vaccination to those who desire it.

The assumption by the County Council of the responsibility for all Poor Law services of the Administrative County immediately raised the question of the adequacy of the institutional accommodation for the sick. The benefit of unified control cannot be better demonstrated than from a study of the steps taken towards providing a fuller and better service to attain this end. The County Council has been able to survey the whole of its area and to consider every factor affecting Hospital and Institutional accommodation.

In previous Annual Reports the conditions found in the survey and the extensive programme of additional hospital buildings have been described. In accordance with the spirit of the new ideal, these hospitals will now be part of the Public Health Service and will thus be free from any stigma attaching to the older Poor Law Institutions.

The brief review of the Poor Law in England already given, covers several centuries and but five years have elapsed since the revolutionary changes in 1930. Clearly, any attempt at an absolute evaluation of the progress already made in such a relatively short period is only to deal with a tiny section of the fabric of our social legislation. Nevertheless, it is indisputable that an auspicious start has been made in the realisation of a new attitude towards the sick poor, an attitude that is in accordance with the high ideals of the English democratic government.

The hospital programme of the County is an immediate and pressing matter. Henceforward these services will become part of the Public Health Service, no distinction being made in treating the sick poor and the sick in more fortunately situated social ranks.

Provision for the Sick in Public Assistance Institutions.

Table XXI on page 118a shows the number of sick beds available on 31st December, 1935, in the eleven County Public Assistance Institutions, together with the numbers of patients admitted and discharged. For the sake of continuity, the Oldchurch Hospital, Romford, is included in this list, although as from 1st October, 1935, the hospital part of the Institution was appropriated for Public Health purposes in accordance with the Local Government Act, 1929. For a considerable number of years the Oldchurch Hospital has fulfilled the function of a large general hospital, serving a population of nearly half a million and it had become increasingly clear that the function of the hospital had greatly exceeded the primary service to those sick persons for whom the Public Assistance Committee was responsible. Complete appropriation has not

as yet been possible, as the Workhouse and Casual Wards are still in use. It is proposed to transfer these persons to the new Sutton's Institution which is in the course of erection and when this is done the whole of the site at Romford will be utilised for the expansion of the Hospital to some 1,050 beds.

Major Improvements carried out at Institutions during the year.

ROMFORD. The erection was commenced of the new section of the Nurses' Home to accommodate 125 persons, together with a new training school for the probationer nurses.

The County Council approved of the erection of a temporary Out-Patient Department, which will be used chiefly for purposes of continuation of treatment for patients discharged from the Wards, but which will in future come to serve more and more as a general consultative department.

In April, 1935, admissions to the Male T.B. Ward were stopped, provision being made elsewhere for these patients and the building was re-planned for use as an isolation block. It now contains 10 single cubicles, a 10-bed and a 6-bed ward and one isolation ward for the treatment of cases of Puerperal Fever. During the year the X-Ray and Light Department were re-equipped and brought up to date.

MALDON. During the year the new Nurses' Home was opened at this Institution. In the house portion a lift is being installed and the second floor re-conditioned to provide suitable accommodation for 65 bed-ridden patients, and these beds will be ready for use in 1936.

COLCHESTER. Alterations have been carried out on the ground floor of the Institution to convert a disused Ward into an Operating Theatre Suite, comprising a theatre, sterilising and anæsthetic rooms. This will enable a surgical unit to be set up to deal with acute surgical cases from Colchester, Stanway and Tendring areas.

An observation unit, consisting of a small ward and a new padded room, has been provided so that noisy patients can be isolated away from the general wards.

Additional Accommodation.

Owing to the demand for in-patient treatment at the Oldchurch Hospital, Romford, it has been necessary to seek additional accommodation for certain classes of the more chronic cases of illness so as to allow the Hospital to fulfil its more urgent function in dealing with those acutely ill. Accordingly, the buildings at Great West Hatch, Chigwell, previously loaned to the Royal Eastern Counties Institution, were taken over by the County Council during the year. In September, 54 mentally defective male and female patients were admitted here from the Oldchurch Hospital. In addition, negotiations were commenced with the West Ham County Borough for the use of Little Heath House, Dagenham, and in January, 1936, the County Council agreed to rent it for a period of three years and it is now being adapted to accommodate 50 senile and infirm patients, together with the necessary staff.

Medical Staff.

1. OLDCHURCH HOSPITAL.

On 1st April, 1935, Dr. Miles was appointed as the Medical Superintendent and Master of the Romford Institution in place of Dr. W. S. O'Loughlin, who resigned after

TABLE XXI.

118a

TABLE A SHOWING BEDS PROVIDED AND OCCUPIED FOR SICK, MATERNITY AND MENTAL CASES FOR THE 12 MONTHS ENDED
31st DECEMBER, 1935, IN INSTITUTIONS BELONGING TO THE COUNTY COUNCIL.
(As shown in the Return Hosp. 6).

Area.	Institution.	Name, Address and 'Phone No. of Medical Officer.	No. of Beds available.			No. of Admissions.	No. of women confined.	Live-Births.	Still-Births.	Deaths among newly-born.	Deaths among Children under 1 year.	Maternal Deaths.	Total No. of Deaths.	No. of patients discharged.	No. of Beds occupied.			No. of operations under general anaesthetics.	No. of Abdominal Sections.
			Men. 1.	Women. 2.	Children* (under 16). 3.										Average. 13.	Highest. 14.	Lowest. 15.		
Colchester ..	Colchester ..	W. F. Payne, Sussex Lodge, Lexden Road, Colchester. 'Phone No. Colchester 2050.	74	78	8	329	16	13	3	—	2	—	95	203	115	128	103	3	—
	Stanway ..	Do. Do.	34	32	—	90	—	—	—	—	—	—	33	43	52	60	47	1	—
	Tendring ..	F. Atthill, Laurels, Great Bentley. 'Phone No. Great Bentley 11.	48	69	8	267	13	13	—	2	3	—	99	148	102	111	94	5	—
Braintree ..	Braintree ..	T. W. Pantor, Bradford Street, Bocking. 'Phone No. Braintree 13.	43	55	8	176	—	—	—	—	1	—	90	86	87	99	81	—	—
Saffron Walden ..	Saffron Walden ..	J. Bartlett, Saffron Walden. 'Phone No. Saffron Walden 218.	28	54	1	99	6	6	—	—	1	1	36	48	61	68	65	6	—
Epping ..	Epping ..	R. Evans, Elm Bank, Station Road, Epping. 'Phone No. Epping 95.	109	131	13	655	20	20	—	—	2	—	133	477	196	220	161	14	—
South Eastern ..	Orsett ..	F. A. M. Nelson, Orsett. 'Phone No. Orsett 47.	80	121	24	873	47	46	2	1	5	—	224	626	176	198	163	—	—
Southern ..	Romford ..	E. Miles, Oldchurch Hospital, Romford. 'Phone No. Romford 1900.	282	449	146	7955	490	444	46	49	97	8	924	7090	814	908	703	2600	833
Chelmsford ..	Billerica ..	J. D. Fiddes, Rubislaw, Mount Avenue, Hutton. 'Phone No. Brentwood 110.	38	45	13	1601	80	72	8	3	4	1	143	831	66	81	52	211	40
	Chelmsford ..	J. T. Whitely, Thornesbrook, London Road, Chelmsford. 'Phone No. Chelmsford 2194.	52	71	6	761	109	103	8	2	3	2	113	643	118	134	113	223	2
	Malden ..	M. J. T. Wallis, 24, High Street, Malden. 'Phone No. Malden 91.	28	29	4	106	11	11	—	—	—	—	33	140	57	61	46	7	—
Totals ..			816	1134	291	12432	792	728	67	67	118	12	1923	10335	1844	2068	1618	3070	875

*Excluding Cote in Maternity Wards.

Page 100

THE UNIVERSITY OF CHICAGO
LIBRARY
540 EAST 57TH STREET
CHICAGO, ILL. 60637

Author	Title	Date
J. H. Pomeroy	The History of the United States	1835
J. H. Pomeroy	The History of the United States	1835
J. H. Pomeroy	The History of the United States	1835
J. H. Pomeroy	The History of the United States	1835
J. H. Pomeroy	The History of the United States	1835
J. H. Pomeroy	The History of the United States	1835
J. H. Pomeroy	The History of the United States	1835

13 years of service at the Institution. In view of the greatly increased work of the hospital and the important position it will occupy in the future County Hospital Scheme, the appointment was made chiefly for administrative duties as it was felt that the Medical Superintendent could devote but little time to clinical work.

Dr. J. M. Marshall was appointed as Assistant Medical Officer on 14th October, 1935, chiefly for duties in the Pathological Department and his appointment has resulted in a considerable increase of the scope of work of this Department.

In view of the increasing demands made upon the services of the Consulting Medical Staff consequent upon the growth of the Hospital, the period and terms of service were revised and increased. The services of Dr. W. Burton Wood, the County Consulting Physician for Pulmonary T.B., were extended to Oldchurch Hospital as Consultant for Diseases of the Chest.

2. BILLERICAY INSTITUTION.

Dr. J. D. Fiddes was appointed as Medical Officer to the Institution on 12th July, 1935, in place of Dr. J. D. Wells who was retired.

There were no other changes in the Medical Officers of the various Institutions during the year, and the names will be found in Table XXI on page 118a.

Children's Homes.

Below are appended details of the Children's Homes in the Administrative County :—

Area.	Address of Home.	Beds available 31st December, 1935.		Beds occupied 31st December, 1935.	
		Boys.	Girls.	Boys.	Girls.
Colchester	The Institution, ..	27	.. 24	.. 20	.. 15
	Villa Road, Stanway				
	"The Chestnuts," ..	28	.. 26	.. 20	.. 22
	"The Firs," "The Oaks," Tendring, near Weeley				
Braintree	.. "Friars," Bradford ..	16	.. 15	.. 14	.. 13
	Street, Bocking, Braintree				
Saffron Walden	.. New Street, Dunmow	8	.. 12	.. 8	.. 10
Epping	.. Coopersale Common, Epping	24	.. 20	.. 24	.. 20
South-Eastern	.. 61-63, Whitehall ..	—	.. 13	.. —	.. 13
	Road, Little Thurrock, Grays				
Southern	.. Scattered Homes. ..	102	.. 66	.. 88	.. 52
	Headquarters :—				
	Harold Wood Hall,				
	Harold Park, Romford				

Area.	Address of Home.	Beds available 31st December, 1935.		Beds occupied 31st December, 1935.	
		Boys.	Girls.	Boys.	Girls.
Chelmsford	Beehive Lane, Chelmsford	—	24	—	18
	"The Gables," High Street, Maldon	26	—	23	—
	"Foxcroft," High Street, Billericay	—	25	—	21
	"Greenbourne," Writtle	32	—	26	—

The arrangement referred to last year between the County Council and the Invalid Children's Aid Association, whereby beds are available at the Mabel Greville Convalescent Home, Walton-on-Naze, was continued.

Children's Summer Camps.

The usual holiday camps for children from the Public Assistance Homes were held at Tendring and Hornechurch during the summer. The children benefited greatly, and thanks are due to all those who worked so willingly to help towards making the camps such a success.

Maternity.

The returns of maternity work undertaken at the County Public Assistance Institutions during the year again show an increase :—

	1934.	1935.
Total number of beds available for maternity cases	69	67
Total number of maternity cases confined therein	649	792

The special units at the St. John's Hospital, Chelmsford, and at the Oldchurch Hospital, Romford, continue to deal with the majority of cases of puerperal fever and pyrexia. The services of these units to the majority of the county serve to illustrate the advantages of a unified administration of hospital services.

Treatment of Trachoma.

The arrangement has been continued with the London County Council for the treatment of Trachoma whereby patients are admitted to the Holborn and Finsbury Institution, receiving treatment as out-patients at the Moorfield's Eye Hospital. Certain cases can also be dealt with at the London County Council Home at Swanley.

Examination of Bacteriological Specimens.

As reported in previous years, the Public Assistance Committee has made arrangements for the Bacteriological examination of specimens from Public Assistance Institutions, &c., with Dr. J. F. Beale, Bacteriologist for Essex. The expansion of the laboratory at Oldchurch Hospital enabled the majority of specimens from the Hospital to be dealt with there.

Representative Consultative Committee.—British Medical Association.

This Committee held one meeting during the year, when various points relating to the Free Choice of Doctor System were considered. The importance of a close liaison between the Public Health Department and the general practitioners of the County has been recognised and the assistance already rendered is much appreciated.

Mortuaries at Public Assistance Institutions.

During the year a survey was made of the mortuary accommodation at the County Council's Institutions. At Romford, Billericay, Stanway, Saffron Walden, Colchester and Braintree Institutions, the accommodation was considered satisfactory for the work done at present. The recommendations with regard to the remaining Institutions have been brought to the notice of the appropriate Committees and at the Maldon Institution the reconstruction of the mortuary has been completed.

Ambulance Facilities.

In the reports for the year 1933 and 1934, a description was given of the regional agreement for the reciprocal use of ambulances. With few exceptions the controlling bodies of ambulances have agreed to this plan and a comprehensive co-ordinated ambulance service now exists in the Administrative County.

The Nursing of the Chronic and Infirm Sick.

In the report for the year 1934 was given the basic points of the scheme for the recruitment of nurses for the care of the chronic sick and infirm. The first training course was commenced at the Epping and Orsett Institutions on March 1st, 1935, with 12 nurses at the former and 10 at the latter.

These have since been increased to 22 at Epping and 20 at the Orsett Institution. The trainees have entered in small groups so that only a proportion of the total number of nurses training at present will have completed a two years' course by March, 1937, but as the situation is at present 7 nurses at Epping and 11 at Orsett will be ready for the final examination by this date. They will then be sent out as Instructed Assistant Nurses to Institutions in the County for the further compulsory year's service in Essex and it is hoped that their services will be permanently retained by paying them a higher salary than is received by untrained assistant nurses.

As more Instructed Assistant Nurses are available for duty in Institutions, the present rank of Junior Assistant Nurse will disappear and in time this trained staff will be utilised to staff all the County Institutions. The aim will be to have full staffs of these Instructed Assistant Nurses working under the supervision of a fully trained nurse so that ward staffing will be on the basis of a fully trained Ward Sister and Staff Nurse, the latter for relief duties when the Sister is off duty. In all cases the Head Nurse or Nursing Superintendent of the Institution will have to be fully trained.

On the whole the response on the part of suitable women to the career envisaged in the scheme has been good and the results of the internal examinations have been extremely satisfactory and gratifying.

Tribute should be paid to the able and energetic manner in which Miss L. Snowden, Lady Supervisor, has assisted in the creation of this scheme. Her deep knowledge of all branches of nursing and her administrative ability in connection with the preliminary work of the scheme, have been extremely valuable.

The experiment has been viewed with some concern by the official Bodies representing the State Registered Nurses and there can be no doubt that these organisations have been actuated by the most commendable desire to prevent any diminution in the social and economic status of the State Registered Nurse. Nevertheless, it is impossible to disguise the fact that fully trained nurses will not come forward in sufficient numbers to form an efficient nursing service for the chronic and infirm sick. It is impossible to contemplate a continuation of those services which have sufficed in the past for the nursing care of these cases, and the care of this large group of sick persons must be recognised as a special service for the improvement of which there has to be a special form of training and recognition of status for those engaged in its creation. The formation of such a special group of nurses, who have the prospect of a career in a recognised and superannuated service, will indubitably serve to define more clearly the various ranks of the nursing profession and lead to the elimination of the untrained woman competing in the field of private nursing on the strength of having had a smattering of experience in some Institution or small Hospital.

On these grounds it is not unreasonable to believe that the creation of a recognised class of nurse for the care of the chronic sick and infirm will actually lead to an improved status of the State Registered Nurse.

Happily there is evidence that the official Bodies representing the fully trained nurse are preparing to co-operate in this field and it is hoped that the Essex Scheme is but the first step along the road to a complete scheme of recognition and training for nurses for the care of the chronic sick and infirm.

Free Choice of Doctor System.

During the year the arrangements were being completed for the "Free Choice of Doctor Scheme" in connection with Public Assistance Domiciliary Medical Service to come into operation in Walthamstow, Chingford and Clacton Relief Areas and on 1st January, 1936, the office of parish doctor disappeared in these areas. It must be emphasised that the scheme is at present on trial and its success depends very largely on the medical practitioners of the areas. A review in April, 1936, after three months of working, showed that in general the work is proceeding well, and persons in receipt of Public Assistance medical relief definitely appreciate the new arrangement whereby they are allowed to select their own medical practitioner.

In essential the schemes in the three areas are the same. Any necessitous person accepting medical relief is shown by the Relieving Officer a list of the medical practitioners in the area who have entered into the Agreement with the County Council under the scheme. The necessitous person can exercise his choice as to the doctor he wishes to have, and receives an order which is taken or presented to this particular practitioner. In the Walthamstow and Chingford areas this doctor then becomes responsible for the domiciliary medical treatment of the patient for a period

of twelve months at a capitation fee of 16/-. If at the end of this period the scheme is still in operation, the patient may, if desired, change to another medical practitioner.

The County Council provide through the medium of the chemists of the areas any ordinary medicaments prescribed by the doctor and the patient has the privilege of presenting the prescription to be dispensed by any chemist who has entered into agreement with the County Council under the scheme.

In the Clacton area the medical practitioners receive a fee of £1 for each patient treated during the calendar year and this fee includes the supplying of necessary medicaments.

In the report for 1936 will be given a more detailed account of the Free Choice of Doctor Scheme, with particular reference to its financial aspect.

The first of these is the fact that the
the second is the fact that the
the third is the fact that the
the fourth is the fact that the
the fifth is the fact that the

the sixth is the fact that the
the seventh is the fact that the
the eighth is the fact that the
the ninth is the fact that the
the tenth is the fact that the

the eleventh is the fact that the
the twelfth is the fact that the
the thirteenth is the fact that the
the fourteenth is the fact that the
the fifteenth is the fact that the

the sixteenth is the fact that the
the seventeenth is the fact that the
the eighteenth is the fact that the
the nineteenth is the fact that the
the twentieth is the fact that the

the twenty-first is the fact that the
the twenty-second is the fact that the
the twenty-third is the fact that the
the twenty-fourth is the fact that the
the twenty-fifth is the fact that the

BIRTHS, DEATHS, ANNUAL RATES, &c., 1835.

Sanitary District.	Estimated Resident Population.	Register Office's Return.			Deaths of Various Ages (Figures supplied by Medical Officers of Health.)										Average, 1835, of ESTIMATED POPULATION.				Comparability Ratio.	Estimated Death-rate.	Per 1,000 Births.			
		Total Births.	Deaths at all ages.	Deaths under 1 year.	(Figures supplied by Medical Officers of Health.)										Birth-rate.	Total Death-rate.	Infantile Death-rate.	Other Death-rate.						
					1 and under 1.	1 and under 15.	15 and under 25.	25 and under 35.	35 and under 45.	45 and under 55.	55 and under 65.	65 and under 75.	75 and upwards.	Total Deaths.										
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)			
URBAN.																								
BARNUM B.	72,600	1,276	30	563	64	61	7	29	26	64	63	66	115	88	568	169	77	633	625	880	125			
BARNUM C.	14,160	145	5	170	6	3	2	1	3	8	9	17	52	61	170	117	12	928	926	849	81			
BARNUM D.	28,910	442	17	372	29	6	6	6	11	8	19	24	86	87	78	306	143	1171	1254	973	98			
BARNUM E.	14,080	189	6	171	13	13	6	6	12	11	10	21	44	95	248	107	96	915	946	661	53			
BARNUM F.	25,880	276	10	248	10	4	2	7	6	11	22	39	64	95	248	107	96	915	946	661	53			
BARNUM G.	4,142	81	2	72	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
BARNUM H.	3,487	62	6	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3			
BARNUM I.	5,384	61	4	74	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3			
BARNUM J.	28,910	442	17	372	29	6	6	6	11	8	19	24	86	87	78	306	143	1171	1254	973	98			
BARNUM K.	19,460	265	12	179	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2			
BARNUM L.	29,690	505	16	213	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12			
BARNUM M.	21,030	241	7	249	13	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12			
BARNUM N.	31,360	745	30	425	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29			
BARNUM O.	180,300	1,805	55	1,025	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102			
BARNUM P.	5,445	89	3	48	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
BARNUM Q.	7,088	80	5	61	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
BARNUM R.	19,120	252	11	203	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12			
BARNUM S.	5,855	84	2	85	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6			
BARNUM T.	12,810	209	8	120	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10			
BARNUM U.	59,910	1,023	47	507	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50			
BARNUM V.	151,390	2,650	72	1,212	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88			
BARNUM W.	121,560	1,433	44	1,226	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60			
BARNUM X.	8,910	113	3	91	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
BARNUM Y.	8,442	165	6	89	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7			
BARNUM Z.	7,232	97	4	85	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3			
BARNUM AA.	47,958	778	30	393	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42			
BARNUM AB.	6,229	66	1	74	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
BARNUM AC.	16,110	307	10	165	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20			
BARNUM AD.	6,389	96	5	74	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9			
BARNUM AE.	124,460	1,670	97	1,286	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62			
BARNUM AF.	50,510	665	23	488	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22			
BARNUM AG.	2,289	29	1	29	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
BARNUM AH.	7,025	38	5	73	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3			
BARNUM AI.	2,182	31	1	32	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
Total																								
	1,101,360	15,148	544	9,998	701	701	66	123	283	291	507	664	290	1,515	2,671	9,998	143	91	920	947	945			
RURAL.																								
BARNUM B.	15,790	208	11	269	9	9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
BARNUM C.	29,480	412	19	216	13	14	3	2	7	6	11	10	25	54	69	115	316	375	118	85	82			
BARNUM D.	16,170	224	14	211	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9			
BARNUM E.	14,010	176	13	149	6	6	3	1	5	3	6	3	13	26	34	48	148	121	108	104	40			
BARNUM F.	15,790	187	5	228	5	5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3			
BARNUM G.	19,820	271	9	247	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12			
BARNUM H.	12,440	195	8	202	10	10	2	5	4	7	6	4	12	21	47	80	293	113	149	62	75			
BARNUM I.	12,690	206	3	152	10	10	1	2	3	7	3	2	13	18	30	125	162	98	162	102	88			
BARNUM J.	24,190	308	9	212	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13			
BARNUM K.	15,770	206	2	168	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7			
BARNUM L.	15,460	173	6	206	5	5	1	2	5	4	8	15	30	64	82	216	112	134	91	945	88			
BARNUM M.	21,260	302	19	260	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20			
Total																								
	216,640	3,019	118	3,333	119	119	16	22	52	66	76	81	196	370	665	2,603	339	117	912	937	935			
TOTAL BIRTHS & DEATHS.																								
	1,317,990	18,167	660	13,331	820	820	82	145	335	357	583	745	1,116	1,885	5,207	12,591	143	91	920	947	945			
TOTAL BIRTHS & DEATHS PER 1,000.																								
	1,317,990	18,167	660	13,331	820	820	82	145	335	357	583	745	1,116	1,885	5,207	12,591	143	91	920	947	945			

The figures in Col. 7-18 are given by the District Medical Officers of Health, whereas the totals are supplied by the Registrar-General.

PART V BIRTHS, DEATHS, ANNUAL RATES, &c., 1935.

TABLE XXII.

BIRTHPLACE DISTRICT	URBAN.	Deaths at Various Ages										Annual Rates per 1,000 of Estimated Population				Comparability Ratio	Births per 1,000 Births						
		(Figures supplied by Medical Officers of Health.)										Infants	Children	Adults	Total								
		Under 1 year	1 to 4 years	5 to 9 years	10 to 14 years	15 to 19 years	20 to 24 years	25 to 29 years	30 to 34 years	35 to 39 years	40 to 44 years	45 to 49 years	50 to 54 years	55 to 59 years	60 to 64 years	65 to 69 years							
BRISTOL	1,226	30	562	64	64	7	29	26	44	53	66	61	113	88	258	16.9	5.2	9.6	52	140	169		
BRIGHTON	14,160	165	5	170	6	2	1	3	3	8	9	10	17	22	41	170	11.7	3.0	3.0	30	1,416	1,416	
BIRMINGHAM	28,910	147	322	28	29	6	6	6	11	19	34	66	87	75	306	13.3	11.1	0.24	0.60	3.0	28,910	28,910	
BIRMINGHAM AND BOSTON	14,080	380	6	171	13	13	6	12	11	6	22	39	44	55	248	10.7	9.6	0.15	0.66	3.0	14,080	14,080	
BIRMINGHAM	28,880	276	16	246	10	4	2	7	6	11	8	22	39	44	55	248	10.7	9.6	0.15	0.66	3.0	28,880	28,880
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20
BIRMINGHAM	14,142	81	2	72	1	1	1	1	2	6	3	10	17	31	72	123	17.4	0.24	0.97	1.95	11.5	20	20</

TABLE XXIII.
CAUSES OF DEATH—YEAR 1935.
(Figures supplied by the Registrar-General).

[illegible]

INDEX.

	PAGE.		PAGE.
Accredited Milk Producers	5, 50	Harold Court Sanatorium	88
Acreage and Population	16	Health Education	67
After-Care (Tuberculosis)	93	Health Exhibitions	67
„ (Orthopædic)	105	Health Visiting Staff	11-14, 98
Ambulance Facilities	121	High Beech Sanatorium	90
Ante-Natal Clinics	98	Home Helps	7, 101-2
Artificial Pneumo-thorax	92	Hospitals (Isolation)	35
Bacteriological Examinations	4, 24, 92	Hospital Treatment (Maternity)	104
Birth-rate	3, 17	Hospital Services	7, 68-71
Birth Control	7, 110	Housing	4, 36
Biological Examinations (Milk)	47	Housing Acts, 1930 & 1935	37
Black Notley Sanatorium	6, 82	Housing (Rural Workers) Act, 1926	38
Blind Persons Act, 1920	65	Housing—Overcrowding	4
British Medical Association Representative Consultative Committee	121	Infant Life Protection	106
Broomfield Court Sanatorium	6	Infant Mortality Rate	3, 17
Care Associations (Tuberculosis)	93	Infectious Diseases (Notifications)	3
Chief Veterinary Officer	5	Isolation Hospitals	35
Children & Young Persons Acts, 1908-1932	106	Laboratory (Bacteriological)	24-35
Child Welfare Centres	98	Lectures to Midwives	109
Combined Medical Service	113	Local Government Act, 1929, Secs. 46, 57, 58 and 63	35-36
„ Treatment Centres	114	London and Home Counties Venereal Diseases Scheme	20
Convalescent Treatment (C.W.)	7, 104-5	Massage and Special Treatment	55
County Nursing Association	109	Maternity Hospital Treatment	104
„ Laboratory Service	24-35	Maternal Mortality	110
„ Sanatoria	82	Maternity and Child Welfare	6, 97-113
County Tuberculosis Scheme	72-95	Medical Service (Combined)	113
Clerical Staff	14-15	Medical Staff	9
Cookery Lectures	112	Mental Treatment Act, 1930	64
Death-rate	3, 17	Mental Deficiency	60
Dental Scheme (Maternity and Child Welfare)	7, 100	Meteorology	23
Dental Staff	14	Midwives, Inspection of	108
Diphtheria	18	„ Lectures to	109
District Nursing Associations	109	Midwives Acts, 1902-26	106
Doctors' Fees	109	Milk, Provision of (Child Welfare)	100
Enteric Fever	18	Milk Supply	5, 45
Essex County Council Act, 1933	55	Milk Samples—Analysis	26
„ County Nursing Association	109-10	Milk and Dairies (Consolidation) Act, 1915	47
Extra Nourishment	94	Milk and Dairies Order, 1926	49
Food and Drugs	59	Milk (Special Designations) Order, 1923	49
Foster-Mothers and Children	106	Milk Producers (Accredited)	50
Gynæcologist	7, 110	Milk in Schools Scheme	5, 52
		Minor Ailments (Maternity and Child Welfare)	105

INDEX—*continued*.

	PAGE.		PAGE.
Notification of Births Acts ..	97	Puerperal Fever and Puerperal	
" " Infectious Diseases	17	Pyrexia	103, 108
Nursing Training	7, 121	Purification of Oysters	4
Nursing Association	109		
Nursing Homes Registration Act,		Rateable Value	16
1927	105-6	Refuse Dumps	56
		Rivers Pollution	4, 40
Obstetric Specialist	7, 103		
Oldchurch Hospital	7, 118	Sale of Food and Drugs Acts ..	59
" Medical Staff	9, 118	Sanatoria	82
Ophthalmia Neonatorum ..	104, 108	Sanatoria Matrons	10
Orthopædic Treatment	105	Scarlet Fever	3, 17
" After-Care	105	Sewage Works and Rivers Pollution	40
" Masseuses	11	Shelters (Domiciliary)	93
Oyster Purification	4	Smallpox, Notifications	3, 18
Overcrowding in Houses	4	Social Conditions	16
		South Essex Waterworks Co. ..	54
Pemphigus Neonatorum	108	Specialist Staff	9
Population	16	Staff, List of	9-15
Preface	3-8		
Propaganda, Public Health ..	67	Technical Staff	10
Public Assistance	7, 115-123	Toddlers' Sessions	7, 98
" " Ambulance		Town Planning	6, 56
Facilities	121	Travelling Expenses (Maternity and	
" " Bacteriological		Child Welfare)	103
Facilities	120	Travelling Expenses (Tuberculosis)	91
" " Billericay		Travelling Health Exhibition ..	67
Institution	119	Tuberculosis	6, 72-95
" " Children's Homes	119	" Dispensaries	76
" " Free Choice of		" Order, 1925	47
Doctor System	122	" Care Associations	93-95
" " Institutions	118	" Institutional Treat-	
" " Lady Supervisor ..	122	ment	
" " Maternity	120	" X-Rays	6, 91
" " Mortuaries	121		
" " Nursing of the		Vaccination	18
Chronic and		Venereal Diseases, Scheme	20-22
Infirm Sick	121	Veterinary Inspection	46
" " Provision for the		Vital Statistics	16
Sick in Institu-			
tions	117	Water Supplies	6, 52
" " Representative			
Consultative		Zymotic Death Rate	17
Committee	121		
" " Trachoma	120		

