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1949

ADMINISTRATIVE COUNTY OF ESSEX

# REPORT

OF THE

# Medical Officer of Health

FOR THE YEAR

# 1949

H. KENNETH COWAN, M.D., D.P.H.

COUNTY MEDICAL OFFICER OF HEALTH

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# HEALTH COMMITTEE

*Chairman :*

COUNCILLOR K. E. B. GLENNY

*Vice-Chairman :*

COUNCILLOR P. PORTER

*Aldermen :*

H. Ashton (*ex-officio*)
P. Astins, C.B.E., J.P. (*ex-officio*)
C. E. S. Blackmore
A. Brooks, O.B.E., J.P.
The Rev. B. C. Cann
K. Cuthbe
F. S. Foster, C.B.E., J.P. (*ex-officio*)
A. W. Green, M.B.E., J.P.
F. D. Smith, J.P.
W. J. Wade

*Councillors :*

H. G. Acres
Mrs. M. Ball
A. Barratt
A. C. Berry
Mrs. M. Bredo
Mrs. A. M. M. Burrell
Major S. W. Collischon

*Councillors :*

P. G. Cottis
F. Cullen
Mrs. C. Custerson, J.P.
F. J. H. Dovey
J. H. Freeman, J.P.
W. H. Herridge
A. E. Hinton, J.P.
Mrs. E. F. M. Hollis
Mrs. E. F. Milburn
O. L. Oxley
J. S. Plumb
C. Portway
Mrs. E. C. Saywood
E. W. Smith
K. Stonebank
G. S. Tilbury, J.P.
Brig. J. T. de Horne Vaizey
Major A. J. R. Waller, J.P.

*Non-members of the County Council :*

Lt.-Cdr. H. Denton
Mrs. J. H. Engwell
Mrs. E. M. Fisk
Capt. G. E. McCreary Kemball
G. A. Malyon
H. E. Martin
J. W. R. Nation
Mrs. A. E. Prendergast
The Dowager Lady Rayleigh, O.B.E.
Mrs. J. Swire
Mrs. M. L. Watts
L. S. Webb
W. H. F. Webb
Dr. J. D. Wells
Miss E. M. Western
Lt.-Col. C. L. Wilson, M.C.
J. K. Wiseman

# STAFF OF HEALTH DEPARTMENT

*31st December, 1949*

---

## 1. CENTRAL OFFICE

**County Medical Officer of Health :**

H. Kenneth Cowan, M.D., D.P.H. (Commenced 20–4–49).

**Deputy County Medical Officer of Health :**

G. G. Stewart, M.R.C.S., L.R.C.P., D.P.H.

**Senior Medical Officers :**

J. L. Miller Wood, M.R.C.S., L.R.C.P., D.P.H., M.M.S.A. (Child Health).
Christina Grant, M.B., Ch.B., D.P.H. (Preventive Medicine).
Hilda Menzies, M.D., Ch.B., D.P.H. (Midwifery and Home Nursing).

**Senior Dental Officer :**

S. K. Donaldson, L.D.S., R.F.P.S.

**Superintendent Health Visitor :**

Miss E. K. Trillwood, S.R.N., S.C.M., Q.N., H.V.Cert. (part-time).

**Non-Medical Supervisor of Midwives :**

Miss E. Sandbach, S.R.N., S.C.M., Q.N., H.V.Cert. (part-time).

**Day Nursery Supervisor :**

Miss D. V. E. Neale, S.R.N., S.C.M. (part-time).

**Tutor to the Health Visitor Students :**

Miss I. M. Lovedee, S.R.N., H.V.Cert., H.V. Tutor Cert.

**County Domestic Help Organiser :**

Miss E. Booth, S.R.N., S.C.M., H.V.Cert. (part-time).

**County Health Inspector :**

A. Marsh, *M.B.E.*, F.R.San.I., F.S.I.A.

**County Ambulance Officer :**

S. E. J. Hart, M.I.R.T.E., A.M.I.B.E. (Commenced 1–12–49).

**Supervising Duly Authorised Officer :**

A. L. Barton.

**Statistician :**

W. Leak, B.A.

**Health Education Organiser :**

E. Gilbertson (Commenced 1–2–49).

**enior Lay Administrative Assistant :**

S. G. Clarke.

**hief Clerk :**

J. G. Cox.

## 2. CENTRALLY ADMINISTERED SERVICES

**mbulance Service :**

| | |
|---|---|
| Supervisors | 12 |
| Head Drivers | 15 |
| Driver/Attendants | 290 |
| Attendants | 21 |

**lental Health Service :**

| | |
|---|---|
| Duly Authorised Officers | 31 |
| Occupation Centre Supervisors | 6 |
| Occupation Centre Assistants | 19 |

**raining Homes :**

| | |
|---|---|
| Superintendents | 3 |
| Other Nursing Staff | 52 |
| Part II Pupils | 27 |
| Queen's Candidates | 22 |

**other and Baby Hostel :**

| | |
|---|---|
| Matron | 1 |
| Other Nursing Staff (Assistant to Matron) | 1 |

## 3. AREA STAFFS

**ea Medical Officer :**

W. J. Moffat, M.B., Ch.B., D.P.H. (South-East Essex) (Commenced 20-6-49).

**ting Area Medical Officers :**

J. D. Kershaw, M.D., B.S., D.P.H. (North-East Essex).
J. Mervyn Thomas, M.D., B.Ch., D.P.H. (Mid-Essex).
W. T. G. Boul, *M.B.E.*, M.D., Ch.B., D.P.H. (South Essex).
F. G. Brown, M.B., B.Ch., B.A.O., D.P.H. (Forest).
J. B. Samson, M.D., Ch.B., D.P.H. (Romford)
C. Leonard Williams, M.R.C.S., L.R.C.P., D.P.H. (Barking).
C. Herington, M.D., B.S., D.P.H. (Dagenham).
H. H. Weir, M.D., B.S., B.Hy., D.P.H. (Ilford).
A. W. Forrest, M.A., M.D., Ch.B., D.P.H. (Leyton).
A. T. W. Powell, *M.C.*, M.B., B.S., D.P.H. (Walthamstow).

**Assistant County Medical Officers :**

*North-East Essex :*

Florence K. Bibby, M.R.C.S., L.R.C.P.
Bessie Howarth, M.B., Ch.B.
*R. W. Cushing, M.A., M.B., B.Ch.
*Eleanor M. Singer, M.Sc., M.R.C.S., L.R.C.P., D.C.H.
*J. Ramsbottom, M.B., Ch.B., D.P.H.
*J. S. Ranson, M.R.C.S., L.R.C.P., D.P.H.
*W. H. Alderton, *M.C.*, M.R.C.S., L.R.C.P., D.P.H.
*J. R. Hetherington, L.R.C.P., L.R.C.S., L.R.F.P.S., D.P.H.
*Jean Hudson, M.B., B.S.
*D. Clendon, B.A., M.R.C.S., L.R.C.P.
*J. C. Skelley, B.Sc., M.B., Ch.B., D.A.

*Mid-Essex :*

Winifred M. Coppard, M.R.C.S., L.R.C.P.
Ethel R. Emslie, M.D., Ch.B., D.P.H., D.C.H. (Resigned 31–12–49).
*S. R. Richardson, B.A., M.D., B.Ch., B.A.O., D.P.H.
A. R. Whitman, B.A., M.B., Ch.B.
Margaret Turner, M.R.C.S., L.R.C.P.
*J. A. Herd, M.D., Ch.B., M.R.C.S., L.R.C.P., D.P.M.
*A. P. Kalra, M.B., B.S., M.R.C.S., L.R.C.P., D.C.H., C.P.H.

*South-East Essex :*

Doris I. Mart, M.B., B.S., M.R.C.S., L.R.C.P., D.P.H.
Christine M. Jacobsen, M.B., Ch.B.
J. C. T. Fiddes, M.B., Ch.B.
*P. X. O'Dwyer, M.B., B.Ch., B.A.O., D.P.H.
*N. S. R. Lorraine, F.R.S., M.D., Ch.B., D.P.H.

*South Essex :*

Lilian Kerr, M.B., Ch.B.
R. G. Meyer, M.B., B.Ch., B.A.O., D.P.H.
Ivy Nicholls, M.B., Ch.B.
J. Paul, M.B., Ch.B. (Resigned 31–12–49).
Mary Sutcliffe, M.A., M.B., B.Ch., M.R.C.S., L.R.C.P., D.P.H.
Doris E. C. Walker, M.B., B.S., M.R.C.S., L.R.C.P., D.A.
Mair E. Williams, M.R.C.S., L.R.C.P.
A. R. Forbes, M.B., Ch.B., D.P.H.
*B. F. Beatson, M.R.C.S., L.R.C.P., D.T.M. & H., D.P.H.
*A. W. Hagger, M.B., B.S., M.R.C.S., L.R.C.P.
*C. D. MacCarthy, M.B., B.Ch., B.A.O.
*E. Anthony, M.R.C.S., L.R.C.P.
*J. I. Williams, M.R.C.S., L.R.C.P.
*A. Borland, M.B., Ch.B.
*M. Headon, M.B., B.Ch., B.A.O.
*J. McFadden, M.B., B.Ch., B.A.O.

*Part-time.

**Assistant County Medical Officers**—*continued*

*Forest :*

E. L. Ewan, M.B., Ch.B., B.Hy., D.P.H.
Eirwen M. Jones, M.B., Ch.B., D.P.H.
Dileas Maclean, M.B., Ch.B.
*J. H. Crosby, M.B., Ch.B., D.H.P.
*H. Franks, M.B., B.S., B.Hy., D.P.H.
*J. L. Patton, M.B., Ch.B., D.P.H.

*Barking :*

*A. C. McLeish, M.A., M.B., B.S., M.R.C.S., L.R.C.P., D.P.H.
Margaret I. Adamson, M.B., Ch.B., D.P.H.
E. Martin, M.B., Ch.B.
E. Popper, M.D.
A. E. Seligmann, M.D., D.T.M. & H.
Violet Spiller, M.D., M.R.C.S., L.R.C.P., D.P.H.
Mary Westlake, M.B., Ch.B., D.P.H.

*Dagenham :*

T. H. Harrison, M.R.C.S., L.R.C.P., D.P.H., D.T.M. & H.
Jeanne C. Lister, M.B., B.S.
Elizabeth Mitchell, M.B., Ch.B.
Madeline Weizmann, M.R.C.S., L.R.C.P.
H. D. H. Robinson, M.R.C.S., L.R.C.P., D.P.H.
Marion Fish, M.B., B.Ch., B.A.O.
Rosa Hertz, M.B., B.S., M.R.C.S., L.R.C.P., M.R.C.O.G.

*Ilford :*

I. Gordon, M.D., Ch.B., D.P.H., M.R.C.P.
Desiree M. B. Gross, M.D., Ch.B., D.P.H., M.M.S.A.
Annie Collins, M.B., B.Ch., B.A.O.
F. L. Groarke, M.B., B.Ch., C.P.H., D.C.H., D.P.H.
I. Nelson, M.B., B.Ch., B.A.O., D.P.H. (Resigned 31–12–49).
Frances E. O'Connor, B.A., M.B., B.Ch., B.A.O., D.P.H., L.M.

*Leyton :*

Mary L. Gilchrist, M.D., Ch.B., D.P.H.
S. C. Lovell, M.R.C.S., L.R.C.P.
C. H. Rotman, M.D., B.S., M.R.C.S., L.R.C.P., D.P.H.
A. R. Fox, M.R.C.S., L.R.C.P.
R. Jacobs, M.D., D.R.C.O.G.
Annie S. Clark, M.B., Ch.B.

*Romford :*

Elizabeth Haga, M.B., B.S., M.R.C.S., L.R.C.P., D.P.H.
A. P. Draper, *M.C.*, M.A., M.D., B.Ch., B.A.O.
Hedwig Symonds, M.D., M.R.C.S., L.R.C.P.

*Part-time.

**Assistant County Medical Officers**—*continued*

*Walthamstow :*

*M. Watkins, M.R.C.S., L.R.C.P., D.P.H.
Mary C. Sheppard, M.A., M.B., B.Ch., B.A.O., D.P.H.
Jessie R. Cripps, M.B., Ch.B., D.P.H., R.C.P.S.
Dorothy B. Hudson, M.B., Ch.B., D.P.H.

**Dental Surgeons :**

*North-East Essex :*

J. F. Godfrey, L.D.S.
R. A. Pepper, L.D.S., H.D.D.
S. N. Manning, L.D.S.
G. W. Lawrence, L.D.S.

*Mid-Essex :*

F. V. Maguire, L.D.S.
A. M. Hughes, *O.B.E.*, *M.C.*, M.R.C.S., L.R.C.P., L.D.S.
B. G. Brown, L.D.S.

*South-East Essex :*

L. C. Lavender, L.D.S.
*H. L. Thorn, L.D.S.
*D. W. Hurley, L.D.S.
*Norah I. Shannon, L.D.S.
*W. Leigh Breese, L.D.S.

*South Essex :*

Charlotte Grieshaber, D.M.B. (Berlin U.).
O. R. Vignale, L.D.S.
*R. B. Allen, L.D.S., B.Ch.D.
*D. Fairfax, L.D.S.
*H. C. Heighton, L.D.S.
*J. McGee, L.D.S.
*B. Wyers, L.D.S.

*Forest :*

R. Chase, L.D.S.
Emma Kimelman, M.D. (Vienna).
Catherine M. Lane, L.D.S.

*Barking :*

H. Cooke, L.D.S.
A. Levy, L.D.S.
R. Tran, L.D.S.
J. Whitelaw, L.D.S.

*Dagenham :*

*B. McKenzie, L.D.S.

*Part-time.

**Dental Surgeons**—*continued*

*Ilford :*

E. V. Haigh, L.D.S.
*M. J. K. Soutter, L.D.S.
*A. G. Clark, L.D.S.

*Leyton :*

A. E. Hall, L.D.S.
*Dorothy M. Powell, L.D.S., L.R.C.P., L.R.C.S., L.R.F.P.S.

*Romford :*

Dora Shirlaw, L.D.S.

*Walthamstow :*

L. W. Elmer, L.D.S.
G. P. Taylor, L.D.S.
R. E. Hyman, L.D.S.
*C. Shamash, L.D.S., B.Ch.D.
J. Timmis, L.D.S.
*R. V. Tait, L.D.S.

**Health Visitors, Midwives, Medical Auxiliaries, etc. :**

| | Whole-time. | Part-time. |
|---|---|---|
| Superintendent or Senior Health Visitors .. .. | 9 | 2 |
| Non-Medical Supervisors of Midwives .. .. .. | — | 7 |
| Supervisors of Home Nurses .. .. .. .. | — | 5 |
| Domestic Help Organisers .. .. .. .. | 10 | 1 |
| Health Visitors, Tuberculosis Visitors and School Nurses .. | 178 | 22 |
| Clinic Nurses .. .. .. .. .. | 5 | 18 |
| Midwives .. .. .. .. .. .. | 92 | — |
| Home Nurse Midwives .. .. .. .. | 167 | 5 |
| Home Nurses .. .. .. .. .. | 38 | 25 |
| Dental Technicians .. .. .. .. .. | 6 | — |
| Dental Attendants .. .. .. .. .. | 32 | 10 |
| Domestic Helps .. .. .. .. .. | 73 | 1,169 |
| Chiropodists .. .. .. .. .. .. | 17 | 1 |
| Day Nursery Matrons .. .. .. .. .. | 31 | — |
| Deputy Matrons .. .. .. .. | 25 | — |
| Nursery Nurses .. .. .. .. .. | 66 | 1 |
| Enrolled Assistant Nurses .. .. .. | 5 | — |
| Wardens .. .. .. .. .. | 30 | — |
| Nursery Students in training .. .. .. | 139 | — |
| Orthoptists .. .. .. .. .. .. | 1 | 4 |
| Speech Therapists .. .. .. .. .. | 13 | — |
| Audiometricians .. .. .. .. .. | 1 | — |
| Psychiatric Social Workers .. .. .. .. | 5 | — |

*Part-time.

# PREFACE

County Hall,
Chelmsford.

*December, 1950.*

*To the Chairman and Members of the Health Committee.*

Mr. Chairman, Ladies and Gentlemen,

I have the honour to present my Annual Report on the health services of the Administrative County for the year 1949. I took up my appointment as County Medical Officer of Health in April, 1949, and my responsibility for the work dates from that month onwards.

The internal working of the central headquarters of the Health Department has to some extent been reorganised by the establishment of a section dealing with child health and by the creation of a general section which assumes responsibility for staffing matters, sites and buildings and other items common to the working of the whole service. There are now, therefore, five main sections—general, child health, midwifery and home nursing, preventive medicine, and mental health, each with a senior medical officer in charge and each with its specialist technical officers working in close co-operation. By a closer integration of the work it has been possible to reduce the establishment of administrative staff, and the Health Committee in June, 1950, were able to recommend to the County Council an overall reduction in the establishment of 16 posts of various grades.

This report has been sub-divided into various sections which are set out in the table of contents.

Before commenting on various items of special interest, it is perhaps desirable to say something about the general effect of the National Health Service Act on the administration of the services. The year 1949 was the first full working year of the new service and, although it is much too soon to draw any definite conclusions as to the ultimate results, certain trends are already apparent, some of them beneficial and others undesirable. Numbered amongst the former is the grouping of hospitals with a consequent overall supervision of services and a pooling of resources which, with the greater facility for suitable planning, will, with the return of more normal national conditions, eventually result in a co-ordinated hospital system capable of dealing efficiently and economically with all the demands made upon it. So far as the local health authority is concerned, there is a greater general awareness amongst the public of the services available and a greater tendency to make use of them. This, whilst it may be financially embarrassing to the local authority in present difficult circumstances, has been one of the aims of public health since local authorities assumed their first responsibilities for the health of the community. The social services are designed to benefit the community and, so long as abuses are prevented, it is desirable to encourage their use within the limits of our national economy.

The less desirable trends include the desire to obtain an unfair share or an unnecessary part of the benefits provided, instanced by the vastly increased pressure on family doctor services, abuses of the Ambulance Service and in a variety of other ways. These are capable of remedy. They may be, and probably are, the manifestations of a wrong conception of, and a false approach to, the new service which will rectify themselves when the newness wears off.

A more disquieting feature, however, lies within the service itself—the tendency of its various branches to drift apart, and for each to become a separate unit. The three main administrative bodies each have their own functions, they are immersed in the day-to-day working of complex and complicated matters, and it is becoming increasingly difficult to secure that the patient is dealt with as a person whose needs may tax the resources of all the authorities concerned, and that those needs should be met with the minimum of delay, control and frustration. Closer working relationships between the authorities at local level are imperative if waste is to be avoided, delay to be prevented and the patient to obtain the fullest benefits available.

## Vital Statistics

The vital statistics for the year, in so far as they may be used as an index of the general health of the population, may be said to be satisfactory as compared with the country as a whole. The infantile mortality rate, the phthisis death rate and the standardised death rate are the most sensitive indices of the social conditions of the population, and in this respect the statistics of the Administrative County are reasonably favourable in present conditions. The infantile mortality rate is the lowest ever recorded, the phthisis death rate continues to decline and the death rate compares favourably with that for England and Wales.

The table of mortality in County Districts on page 99 is of interest in showing the fluctuations in the standardised death rate in different areas of the County, but of itself cannot be said to give a true indication of the social conditions or general health of the population of the districts.

Morbidity statistics, i.e. the number of persons suffering from any disease expressed as a rate per 1,000 of the population, would be of much greater value as an indication of the general health of the population, but except in the case of notifiable infectious diseases, such figures are not available. The details of the numbers of new claims for sickness benefit now available from the Ministry of National Insurance give a crude and broad picture as to the amount of general sickness from all causes, and these will be included in future reports. An analysis of the figures into age and sex groups and the nature of the illness would be of the greatest value in assessing the health of the community, the incidence of disease and the trends of ill-health, and it is hoped that eventually such statistics will be made available.

Although, therefore, the vital statistics continue to show some improvement, there is no reason for undue satisfaction or complacency. The death rate may decline, or at least show no increase, the incidence of certain diseases may lessen, but whilst problems like tuberculosis, cancer and infectious diseases like poliomyelitis still stare us in the face, preventive and social medicine has vast tasks to face. The

almost untouched fields of social pathology are also waiting to be cultivated, and the study of health in its community context will uncover causes of disease which will eventually be reflected in further and greater improvements in our vital statistics.

## Tuberculosis

This disease continues to present the most serious single health problem. Although there has been a slow but steady decline in the notifications of respiratory tuberculosis since 1947, the figures remain at a higher level than that previous to the late war. The advent of mass radiography and better means of diagnosis may be responsible to some extent for the tendency of notifications to remain relatively high, but, whatever the cause, the problem is as great as it was twelve years ago, and resources are strained in attempting to deal with it.

The death rates from all forms of tuberculosis are the lowest ever recorded in the Administrative County, but nevertheless tuberculosis still ranks as one of the chief causes of death, with a rate in its respiratory form of 336 per million population.

The greatest incidence of respiratory tuberculosis occurs in the age groups from fifteen to forty-five, with its maximum in the twenty-five to thirty-five year group. Moreover, the highest numbers of deaths have a very similar age distribution. Herein lies the tragedy of this disease. Those attacked belong, in the main, to the younger elements of the population, the groups which have an expectation of life of as much as fifty years, and at the best the attack means a long period of invalidism, prolonged absence from the productive and social life of the community and, not infrequently, an imposed change of occupation with perhaps a permanently lowered standard of living. At the worst death supervenes in the prime of life.

This is the nature of the problem with which we have to deal; a task, on humanitarian and social grounds, of the greatest urgency and, at the same time, susceptible of solution in large degree even without a specific remedy.

The Local Health Authority is charged with the duty of taking action for the prevention of tuberculosis and for the after-care of those who suffer from it. It is the duty of the Regional Hospital Boards to provide the treatment; thus the patient will, in the course of his illness, come under the care of both of these authorities as well as that of his family doctor. The chest physicians who treat the patient work for both authorities and to this extent there is complete unity of purpose if the full resources of the authorities are made available to them. In the realm of after-care the local authority has a most important part to play. The advent of new forms of treatment now successfully in operation has rendered more hopeful the course of the disease; but recovery is still a long and arduous process which requires the maximum of assistance to the patient at every stage, not least when he leaves hospital to return to the community. An outline of the measures applied in the after-care of the patient appears in the section of this report devoted to Preventive Medicine, Care and After-Care, and too much emphasis cannot be laid on their importance. The time and money involved in meeting the needs of the patient in this direction can be numbered amongst the most useful and beneficial activities of the County Council.

The prevention of tuberculosis involves, in the present state of our knowledge, a series of complicated and costly operations. The disease is infectious, the infection is

widespread and most of us have at one time or another been exposed to infection without manifesting signs. Whilst the active agent is known and the related factors in the causation have been studied over a period of years, there is as yet to our hand no specific measure of prevention, although hopeful signs of such an instrument becoming available appear nearer than the horizon.

Amongst the contributory causes predisposing to tuberculosis is bad housing.

> "In Salford the phthisis death rate was 5.2 per 1,000 where all houses were back to back and only 2.8 where no such houses existed. In certain insanitary districts in Liverpool containing courts with back to back houses, the phthisis death rate was 4 per 1,000 (average of three years). The death rate from phthisis in the same areas, after reconstruction, fell to 1.9 per 1,000 (average of three years)."

Many other instances might be quoted of similar circumstances. Prominent, therefore, amongst the costly and complicated operations in the prevention of tuberculosis is the provision of better housing conditions. Other related factors of a general nature include adequate nutrition, access to fresh air and sunshine, and a generally high standard of living for the population. The increase in the incidence of tuberculosis during the war was a significant indication of the results likely to occur from the slackening of effort, engendered by special circumstances, to maintain the general resistance of susceptible age groups to infection.

Amongst the specific actions in prevention is the removal of child contacts from the households of infectious patients and this assumes a special significance at present with the general overall shortage of beds in hospital for patients suffering from tuberculosis. It will now be possible to supplement this measure with B.C.G. vaccination and thus provide for the child an increased resistance to the disease. Both of these measures designed to prevent the spread of infection require the provision of facilities for the care of the child apart from his own home, and involve either boarding out with foster parents or the provision of suitable hostels. Two specific points require emphasis—first, foster parents have got to be found and the response does not meet the demand; and second, the provision of either boarding out or accommodation in a hostel cannot be made without the expenditure of money. It is suggested that even in these difficult times money spent on these objects, insignificant as it is in relation to expenditure in other directions, is well justified.

In the Appendix to this report will be found a short article on Tuberculosis Attack Rates in the Administrative County, comparing the rates over a period prior to the war with the post-war figures. It is of interest that in certain age groups the attack rates in 1947–48 are significantly higher than in 1930–32.

## Maternity Services

The care of the expectant mother forms one of the major activities of authorities concerned in the administration of the National Health Service. Provision is made for supervision either in the mother's own home by the family doctor or the antenatal clinic of the Local Authority or Regional Hospital Board and, if it becomes necessary, in the wards of the maternity hospital.

The fact that all three authorities, the Regional Hospital Board, the Executive Council and the Local Health Authority, have some degree of responsibility for the

patient during pregnancy and confinement may be a serious disadvantage unless each phase of the work is closely knit and unless the arrangements made locally by each body dovetail together.

The essentials, in so far as the patient is concerned, are that she shall have adequate medical supervision, advice and instruction during pregnancy; she shall have all the services and equipment required for her confinement either in her own home or in hospital; and that she shall have a medical examination some few weeks after the confinement to ensure that all is well and that her health has not suffered in any way from her confinement.

Simple as these requirements seem, they involve the organisation in every area of a co-ordinated system of services which include the family doctor, the consultant obstetrician, the local authority medical officer, the midwife and the health visitor and the provision of ante-natal clinics and hospital beds.

The Local Health Authority is concerned now with the provision of the domiciliary midwifery service, but its responsibility does not end there. The domiciliary services must be linked with the family doctor and hospital services if the patient is to be dealt with efficiently in every eventuality.

Consultation has therefore taken place with officers of the Regional Hospital Boards, and with consultant obstetricians, to try to formulate a co-ordinated series of services in hospital areas. The relationship of the midwife to the family doctor, each with their own responsibility for domiciliary midwifery, has also been studied with a view to obtaining the closest possible working relationship. I have addressed meetings of midwives in the County and branches of local medical associations on this subject, and notwithstanding difficulties which supervened in the early days of the National Health Service in relation to the respective responsibilities of family doctors and midwives, the service appears to be working reasonably well and the difficulties appear to be resolving themselves.

The fall in the birth rate, however, and the easier access to maternity hospital accommodation has resulted in a falling off in the numbers of mothers being confined in their own homes, with a consequent diminution in the amount of work being undertaken by domiciliary midwives. If this trend continues it may be necessary to reorganise the domiciliary midwifery services to meet the lessened demand, and the situation is being kept under continuous review.

### Home Nursing

Mention is made in the body of the report of the proposal to commence a self-contained county training school for home nurses. There is already in existence at Leytonstone a Key Training Home of the Queen's Institute of District Nursing, which caters for the training of 20–24 student nurses each year. There are, however, in other parts of the County—Colchester, Dagenham and Walthamstow—training homes which are not being used for this purpose.

In view of the shortage of trained home nurses it appeared desirable to take full advantage of the potential facilities in the training homes and of the material available in the districts served by the homes for the training of student nurses.

It is proposed, therefore, that each of the training homes in the Administrative County shall be responsible for the practical training of an appropriate number of student home nurses and that the training home at Leytonstone shall be constituted as the headquarters of the scheme where the theoretical training will be undertaken. Students from the other homes will reside at the Leytonstone Home for one month, during which time the lectures as required in the syllabus of training will be given. The training will be so arranged that the theoretical instruction will follow upon a short period of practical training and be followed by a further three or four months of practical work. This arrangement will obviate the need for students going to London for lectures at frequent intervals throughout the course of training as is the case at present and will convert the training scheme into a self-contained Essex County Training School for Home Nurses. The "block system" of giving the lectures is experimental and will be judged by results, but it is not anticipated that it will be less effective than the present system of distributing the lectures throughout the whole period of the course. The Queen's Institute of District Nursing have approved the scheme as an experiment for a period of two years, and it is anticipated that when the scheme is in full operation, it will be possible to increase the number of student home nurses to 60 per annum. Candidates from areas outside the County will be accepted for training on terms to be arranged.

## Health Visiting

The acute shortage of trained health visitors indicated the need for the establishment in the County of a training centre for health visitors who would enter into a contract to provide service in the County after training. Arrangements were therefore made in conjunction with the County Education Committee for the provision of a training scheme for health visitors at the South-East Essex Technical College. The scheme provides for the training of a maximum of twenty students, and the course extends over three terms. In September, 1949, a health visitor tutor was appointed, and the first course (of six months only) commenced in January, 1950. Students were accepted, by arrangement, from East Ham and West Ham, as well as those appointed by the County Council, and a total of twenty students attended the first course.

The theoretical side of the training is undertaken at an annexe of the Technical College and the practical work is carried out in various parts of the County, both urban and rural. The Course has been approved by the Ministry of Health and the Royal Sanitary Institute (the examining body) and it is pleasing to report that officers of the Ministry of Health who carried out an inspection of the scheme in May, 1950, expressed satisfaction with the arrangements; a view which was confirmed by the hundred per cent. success of the students trained.

## Domestic Help Service

Many local authorities provided domestic help in the home, particularly for maternity cases, prior to the late war, but it was during the war, under Defence Regulation 68E, that a major extension of this service took place. The Regulation

authorised the provision of domestic help not only to maternity and child welfare patients, but in any other case of need and during the difficult circumstances of the war, when many women were employed in factories and otherwise, extensive use was made of the service. This practical demonstration of the need for, and the usefulness of, this service led to the inclusion in the National Health Service Act of powers for local authorities to provide domestic help in a variety of circumstances connected with illness or emergency in the home.

As was to be expected in present-day difficult circumstances there has been a rapid expansion of the service to meet the demands placed upon it.

The acute shortage of hospital beds, particularly for the chronic sick, has led to embarrassment in many homes, and the provision of a domestic help has, at least to some extent, alleviated the burden. There has, therefore, been a steady and increasing call upon the service to meet acute emergencies arising at home through illness, and to help with the care of the chronic sick and the aged.

In an assessment of the usefulness of the service and of its relative value in financial terms to other social services, certain important factors should be borne in mind.

Firstly, on humanitarian grounds, there is as much need in many homes, in circumstances of illness, to provide domestic help in the home as there is to provide medical and nursing care. Secondly, the provision of help in the home will often obviate the necessity for the admission of a patient to hospital and lessen the strain on an overburdened hospital service. Thirdly, in the case of the aged and infirm, it may be possible by the provision of help in the home, to prevent the breaking up of the family unit by the admission of the aged person to an institution or home. Fourthly, there is a variety of other considerations related to the care of the children in the home, the welfare—industrial and otherwise—of other members of the family and the relief of the general stress occasioned by the occurrence of illness.

In view of the relatively high demand upon the Domestic Help Service from the chronic sick and aged, it is of interest that Sheldon in *The Social Medicine of Old Age* points out that almost one-third of the aged in their own homes are under medical attention ; ninety-eight per cent. of old people continue to live at home and only two per cent. are living in hostels or institutions ; and amongst the aged themselves and their relatives there is a great desire to preserve the family unit and to stave off for as long as possible the breaking up of this unit by the admission of the aged person to an institution. Large numbers of old people suffer from severe or mild degrees of limitation of movement, and it has been found that ageing women give up shopping five years before giving up their actual house-work.

These considerations have an important bearing on the scope of the service to be provided. It is important that in many households the service should not be limited to mere tidying and cleaning, but, if the real needs are to be met, the assistance given should include washing, mending, shopping and other tasks which the efficient housewife performs. The true conception of a domestic help service is that of an auxiliary to the other great social services of home nursing, welfare and hospitals, and it has an important socio-medical background.

## The County Ambulance Service

A report on the County Ambulance Service will be found on page 37. It will be observed that there has been a steady increase month by month in the number of patients carried and in the mileage covered by ambulance and sitting case vehicles. The demands made on the transport available come, to a large extent, from out-patients and, in order to ensure that ambulances or cars are used only for essential purposes, constant contact is maintained with hospital authorities. A conference between members of the Health Committee and all hospital authorities serving the Administrative County was held in the latter part of the year when the whole subject of the Ambulance Service and its relationship to the hospitals was discussed. As a result of this exchange of views, it is hoped to put into operation certain suggestions which will enable the service to run more economically without loss of efficiency.

As is pointed out in the report of the County Ambulance Officer, preliminary steps were being taken towards the end of the year for a reorganisation of the service and for the substitution of a system of radio-communication for the existing arrangements. When the Service has been reorganised and adequate communications are available, delays will be obviated and the mileage covered in relation to persons carried should be greatly reduced.

## Infantile Paralysis

An account of the outbreak of acute poliomyelitis in the County during the latter half of the year is contained in the appropriate section of the report. Contrary to the experience of the country as a whole, the incidence of the disease in Essex was much higher than that prevailing during the last epidemic in 1947. The death rate per thousand of the population was also higher than in 1947 but the case mortality rate, i.e. the percentage number of deaths amongst those attacked by the disease, was lower (9.2 per cent.) than in 1947 (11.3 per cent.), an indication of the lesser severity of the epidemic.

It appears that some seventy-eight per cent. of the cases had some degree of paralysis and about forty-three per cent. had some residual paralysis at the end of the year. It is now a reasonably well-established fact that there is a connection between excessive exercise taken during the initial mild stage of the disease and the paralysis which follows, as was pointed out by Dr. J. S. Ranson in the Annual Report of my predecessor in connection with the outbreak of acute poliomyelitis in Essex in 1938. Patients are now warned of the importance of complete rest for children and others displaying symptoms of a mild infectious condition during periods of prevalence of acute poliomyelitis.

An interesting point in connection with the mode of spread of the infection is mentioned in the report on the epidemic in 1949, i.e. the high relative incidence of cases in the households of 'bus conductors. Reports on outbreaks of acute poliomyelitis from many parts of the world vary in the percentage of cases where infection by direct contact appears to have been proved, but generally the indications point to a certain number of cases resulting from direct infection, others being traceable to abortive cases, with the likelihood that healthy carriers play an important part in the spread of infection. It is in the latter context that the 'bus conductor, exposed

daily to the possibility of massive infection from early or abortive cases, may, in these cases mentioned, have played the part of a healthy carrier of the disease.

Continuous enquiry is being conducted into the causation of acute poliomyelitis and close co-operation is maintained with the Department of Medicine at Cambridge University in their investigations into the circumstances of cases occurring in the County. Most Medical Officers of Health in Essex are participating in these enquiries and the results are collated by Dr. A. McFarlan, of Cambridge University, together with those obtained from certain other counties. Already a large amount of information is available related to factors associated with the cases and it may be that useful conclusions will eventually be reached with regard to causation, treatment and control of the disease.

## Conclusion

It is considered desirable this year to include in the report a full list of the staff. For some years to come this can be used as a basis and it will be necessary in subsequent reports only to record such changes in staffing as occur during the year.

In concluding this brief note on certain of the salient features of the health services, I would like to convey my thanks to my predecessor, Dr. W. A. Bullough for the help he has afforded to me in familiarising myself with the work of the Department. His long experience and detailed knowledge of the County have been placed at my disposal and have proved most useful. Dr. G. G. Stewart has spared no effort in acquainting me with the details of the actual day to day working of the service and during the early days of my assuming responsibility his assistance was invaluable. On the administrative side Mr. S. G. Clarke has proved himself to be an officer to whom hard work is second nature and he is a great asset in disposing of masses of detail which would otherwise clog the machine. The Senior Medical Officers and their administrative staffs are responsible for the compilation of this report and the technical officers have each contributed to it in their special spheres.

Finally, I would like to express my gratitude to the Chairman for his continuous and unfailing interest in the work of the Department. It has been a great encouragement to have his wide knowledge of county affairs at my disposal and to have his unstinted support throughout a difficult period.

The generous assistance and co-operation I have received from all quarters is a good augury for the future, which may well prove even more difficult, and I can only hope they will continue to be forthcoming.

I have the honour to be,

Your obedient Servant,

Kenneth Jordan.

*County Medical Officer of Health.*

# SECTION I—STATISTICAL

## ACREAGE, POPULATION AND SOCIAL CONDITIONS

THERE were no changes during 1949 in the area of the Administrative County, which remained at 959,464 acres. The civilian population as estimated by the Registrar-General increased by 23,800 from 1,530,900 to 1,554,700. There were 11,170 non-civilians stationed in the County giving a " total " population of 1,565,870. The natural increase of population during the year was 8,836 showing that excess of inward over outward migration was the most important factor in the increase of population. The acreage and the civilian population of each County District is given in Table I.

For the administration of the health services which are the responsibility of the County Council, the County has been divided into eleven Health Areas. In the annual report for the year 1948, short descriptions of the social conditions of these Areas were given. The population of each Area has increased during the past year but the rate of increase has varied immensely from 3.9 per 1,000 in South-East Essex and 5.7 in Leyton and Walthamstow to 20.0 in South Essex, 20.6 in Dagenham and 50.8 per 1,000 in Forest, the more considerable increases being largely the result of new housing by the London County Council. Table I also gives the population of each Health Area.

## VITAL STATISTICS

The principal vital statistics of the Administrative County are given in Table I. This table also gives the same figures for each County District, for each Health Area and for Urban and Rural aggregates of County Districts. The principal annual rates for the County are set out below, with figures for the previous three years for comparison :—

| | *1946* | *1947* | *1948* | *1949* | |
|---|---|---|---|---|---|
| Live Birth Rate .. | 20.6 | 21.2 | 17.4 | 16.0 | per 1,000 population |
| Still Birth Rate .. | 24.7 | 20.3 | 20.1 | 19.3 | ,, ,, total births |
| Illegitimate Birth Rate | 51.8 | 40.0 | 40.6 | 38.9 | ,, ,, live births |
| Death Rate (All Causes) | 10.4 | 10.7 | 9.4 | 10.4 | ,, ,, population |
| Infant Mortality Rate .. | 33.4 | 28.3 | 25.1 | 24.7 | ,, ,, live births |
| Infant Mortality Rate .. (illegitimate infants) | 67.8 | 42.1 | 35.1 | 44.3 | ,, ,, illegitimate live births |
| Maternal Mortality Rate | 1.45 | 0.81 | 0.96 | 0.75 | ,, ,, total births |

### Live Births

There were 24,935 live births to Essex residents registered during the year giving a birth-rate of 16.0 per 1,000 population. The birth-rate is falling but is still appreciably above the pre-war average for the years 1934–38 of 14.5. Comparisons of birth-rates in local areas based on the general population are not of much value owing to different population structures and will not be made.

### Still Births

Four hundred and ninety-two still births were registered in 1949 giving a rate of 19.3 per 1,000 births. This figure represents a further small fall in this rate which has now registered some improvement in each of the last twelve years since 1937 when it was 34.1 per 1,000 births.

### Illegitimacy

Illegitimate births numbered 992, of which 21 were still births. The percentage of live births which were illegitimate was 3.89, a decrease on each of the other post-war years.

### Infant Mortality

There were 617 deaths of infants under the age of one year giving an infant mortality rate of 24.7 compared with 25.1 in 1948, which was, at that time, the lowest figure ever recorded. The mortality of illegitimate infants was as usual heavier than that of legitimate infants, namely 44.3. This is rather more than last year, when it was 35.1, but in view of the small number of deaths involved the increase has no statistical significance.

It will be seen from Table I that the Health Areas had rates varying from 16.5 in Romford to 31.0 in South-East. The experience of one year is not however sufficient to differentiate between deviations due to social factors and those caused only by chance fluctuations. The report for 1946 included an article by Professor Greenwood in which, examining the incidence of Infant Mortality in the quinquennium 1940–44, he came to the conclusion that there were at that time real differences in infant mortality throughout the County. That this continues to be the case has been shown by a similar analysis of the mortality in 1945–49. Health Areas to show significant divergences were : South with a rate of 33.9 compared with the County average of 30.0 and Ilford with a rate of 25.7. In addition, the Borough of Chingford had the significantly low rate of 22.7.

### Maternal Mortality

The deaths of 19 women in or as a result of childbirth give a maternal mortality rate of 0.75 per 1,000 births, a lower rate than in any previous year. Five deaths were ascribed to " puerperal or post-abortive sepsis " and 12 to " other maternal causes ".

### Mortality at all ages

The general mortality rate for the Administrative County was 10.4 per 1,000, compared with 9.4 for 1948. Table III sets out the number of deaths from various causes in the County, in County Districts and in the Health Areas. The following Table gives for the last four years death rates for some of the principal causes of death :

| | *1946* | *1947* | *1948* | *1949* | |
|---|---|---|---|---|---|
| Tuberculosis (Respiratory) .. | 356 | 372 | 352 | 336 | per million population |
| ,, (Non-Respiratory) | 54 | 54 | 50 | 37 | |
| Syphilitic Disease .. .. | 49 | 53 | 39 | 33 | |
| Influenza .. .. .. | 106 | 91 | 27 | 127 | |
| Cancer .. .. .. | 1,804 | 1,803 | 1,733 | 1,760 | |
| Diabetes .. .. .. | 74 | 62 | 61 | 70 | |
| Intra-cranial Vascular Lesions | 1,145 | 1,261 | 1,099 | 1,191 | |
| Heart Disease .. .. | 2,681 | 2,980 | 2,697 | 3,164 | |
| Bronchitis .. .. .. | 588 | 642 | 459 | 617 | |
| Pneumonia .. .. | 455 | 490 | 334 | 443 | |
| Ulcer of Stomach or Duodenum .. .. | 120 | 113 | 99 | 107 | |
| Nephritis .. .. .. | 226 | 245 | 201 | 200 | |
| Suicide .. .. .. | 98 | 87 | 99 | 89 | |
| Road Traffic Accidents .. | 96 | 87 | 88 | 83 | |
| Diarrhoea under 2 years .. | 2.09 | 1.78 | 1.50 | 0.92 | per 1,000 live births |

The increase of 1 per 1,000 in the general death rate is almost entirely accounted for by increases in the number of deaths from five causes : heart disease, bronchitis, pneumonia, influenza and intra-cranial vascular lesions. Most other causes have shown decreases or have remained fairly steady.

There were further decreases in the death rate from tuberculosis (both respiratory and non-respiratory), syphilis and infant diarrhoea, the rate for the last-mentioned category having been reduced by more than one half since 1946.

### Mortality by age and sex

Table II gives the number of deaths in various age groups and for each of the sexes for the several causes of death.

Increases in the number of deaths, when compared with 1948, were greatest among men and women of 65 and over, the percentage increases being 19.6 and 15.6 respectively over 1948. In the age group 45–64 there were smaller increases of 8.4 per cent. and 11.1 per cent. It is in these two age groups that the five causes mentioned above as having large increases principally operate.

Among adults between 15 and 45 years of age there were fewer deaths than in 1948, the reduction of 107 such deaths being spread over several causes. There were 19 more deaths among school children, the increased prevalence of acute poliomyelitis with 10 deaths being one of the causes. On the other hand, there were 29 fewer deaths between the ages of 1 and 5. The decrease in the mortality under the age of one year has already been noted.

### Mortality in County Districts

For the first time since the recent war the Registrar-General has provided comparability factors which, by allowing for the age distribution in each local population, make possible comparisons between local death rates.

In view of the small number of deaths in some districts in one year, it has seemed best to use the experience of several years to determine the relative mortality in different districts. Table IV shows the crude death rate in the period 1946–49 in each County District and Health Area, the comparability factor and the standardised death rate. The rates have been compared with the County rate and where the difference is such that only once in 100 or more times might such a rate in that sized district be expected by chance on the assumption of a uniform death rate equal to the county rate, this fact is indicated in the last column by " High " or " Low ".

### Morbidity Statistics

Information as to the amount of sickness in the community is still very small, the principal source apart from notifications of infectious diseases being the monthly sickness survey made by the Social Survey of the Central Office of Information. This measures the amount of sickness in groups representative of the country as a whole, and no information as to local variations from the national rates is available.

A step forward was taken in 1949 when the Ministry of National Insurance made available to Local Health Authorities details of the number of new claims to sickness benefit received at their local offices each week. The figures given are not analysed in any way. There is no information as to the age or sex of the applicant or the illness or injury causing the incapacity, but the figures do give some indication of the amount of incapacity in the working population and local variations are revealed. For this reason the initiative of the Ministry is welcomed, and commencing in November, 1949, the number of claims received weekly at each local office of the Ministry in Essex has been obtained and tabulated. It is hoped in future years to include in this report the available figures and the conclusion which may be drawn from them. It is to be hoped that fuller information from this source will soon become available.

# SECTION II—GENERAL

## STAFF

AS in previous years, difficulties were experienced in 1949 in recruiting sufficient professional and technical staff to maintain a number of the Health Services, further reference to which is made in the appropriate paragraphs below.

### Area Medical Officers

Under the scheme for the decentralisation of administration of certain functions of the County Council as Local Health Authority, with the approval of the County District Councils concerned, ten Medical Officers of Health continued to act as Area Medical Officers pending the completion of negotiations in regard to the making of permanent appointments. Dr. W. J. Moffat was appointed Area Medical Officer as well as Divisional School Medical Officer in South-East Essex (also appointed Medical Officer of Health to the Rochford Rural District Council), commencing duty on 10th June, 1949, in succession to Dr. N. S. R. Lorraine (also Medical Officer of Health to the Benfleet, Canvey Island and Rayleigh Urban District Councils), who had carried out the duties of these posts since 5th July, 1948.

### Senior Medical Staff

There were no changes in the Senior Medical Staff of the Central Office, but Mr. Helen Campbell—who had been undertaking certain duties in connection with the Midwifery and Home Nursing Services—was seconded to the Ministry of Health at their request in May for the remainder of the year.

### Combined Medical Services

Under the arrangements made between the County Council and the County District Councils for Combined Medical Services in accordance with Section 111 of the Local Government Act, 1933, the Medical Officers of Health of the majority of County Districts in the Administrative County continued to undertake part-time duties as Assistant County Medical Officers. The following changes took place during the year under review :—

(1) Chigwell and Waltham Holy Cross District

Dr. H. Franks commenced duty as Medical Officer of Health for the Chigwell and Waltham Holy Cross Urban Districts on 1st January, 1949, in succession to Dr. L. S. Fry.

(2) Epping and Ongar District

Dr. H. Franks continued to act as temporary Medical Officer of Health for the Epping Urban District and the Epping and Ongar Rural Districts until the appointment of Dr. J. L. Patton, being seconded by the County Council for this purpose. Dr. Patton commenced duty on 21st March, 1949.

(3) Braintree, Dunmow and Witham District

Dr. W. J. Moffat resigned his appointment of Medical Officer of Health for the Braintree and Bocking and Witham Urban Districts and the Braintree and Dunmow Rural Districts as from 19th June, 1949, Dr. A. P. Kalra being appointed to succeed him on 1st November, 1949.

(4) Tendring, Brightlingsea, Clacton, Frinton and Walton District

Dr. J. Ramsbottom continued to act as temporary Medical Officer of Health for the Tendring Rural District and the Brightlingsea, Clacton and Frinton and Walton Urban Districts throughout the year; during this time negotiations, involving a variation of the Scheme, were satisfactorily concluded regarding the appointment of his successor. Dr. F. L. Groarke was appointed to the post in December, 1949.

(5) Chelmsford and Maldon District

The County Council put forward proposals involving the appointment of a whole-time Medical Officer for the Borough of Maldon, Burnham-on-Crouch Urban District and Chelmsford and Maldon Rural Districts and Assistant County Medical Officer which also involved an alteration in the Scheme. It was not found possible during the year to reach agreement with the County Districts concerned.

## Assistant County Medical Officers

The recruitment of Assistant County Medical Officers to fill vacancies proved very difficult, and it was no easy task to maintain a sufficiently large medical staff to undertake all the commitments of the Health Services. Numbers as well as the type of applicants for these posts fell far short of requirements and it was not possible to maintain the full establishment. On December 31st there were 40 whole-time Assistant County Medical Officers—six short of the full number.

It is desired to place on record the fact that Dr. Mary D. Rankine retired in January, 1949, after serving the County Council as Assistant County Medical Officer for 26 years.

## Other Professional Staff

In common with the majority of other Local Health Authorities, grave difficulties were experienced in providing even limited facilities for the dental treatment of priority classes because of the acute shortage of Dental Officers and, at the close of 1949, the equivalent of only 28 whole-time dentists was employed out of an establishment of 66; similar conditions applied to the recruitment of Physiotherapists, and it was impossible to maintain a full Orthopædic Service owing to shortage of staff. Only three full-time and one part-time (equivalent to a total of 3.7 whole-time officers) were employed—3.3 short of establishment.

The supply of trained Health Visitors and of Midwives again fell short of demand and this, coupled with the increased use made of the services of Home Nurses, resulted in the Nursing Services meeting only minimum requirements. The staffing position

prevented any development of the Health Visiting Service in accordance with the Proposals made under Section 24 of the National Health Service Act, 1946. To assist in alleviating this national shortage, a training course for Health Visitors was established by the Health Committee in conjunction with the Education Committee and the East and West Ham County Borough Councils. The centre for the course is the South-East Essex Technical College, Dagenham, and there are facilities for training 20 students—eight of whom are sponsored by the County Council. In July, 1949, Miss I. M. Lovedee took up duties as Health Visitor Tutor.

Every effort was made to maintain the Midwifery Service, and the Home Nursing Staff was augmented by the recruitment of male nurses for duty in Urban Areas.

The gradual decentralisation of certain of the Health Services resulted in a number of changes in the organisation of the Central Office; a review of the staff was made during the year and the Department was reorganised into five sections. Similarly, the increased duties placed upon the Health Areas necessitated constant review of their administrative and clerical staff and increases in the establishments were approved to meet urgent demands. Consideration of the final establishments was deferred in order that the full implications of decentralisation could be assessed.

## TRANSPORT FOR STAFF

In accordance with the policy of the Council of providing County cars for staff whose official duties necessitate a relatively large amount of travelling, the majority of such professional and technical officers of the Health Department were allocated one of these vehicles for their use. With the restriction of the supply of new cars for the home market, the demand for cars always exceeded the supply—there being an average of thirty approved officers throughout the year awaiting the provision of such vehicles.

Following upon the receipt of Ministry of Health Circular 21/49, dated 21st March, 1949, application was made for priority in delivery of thirty-eight 8 h.p. cars for use by midwives and eighteen were delivered before the end of the year, in addition to five 10 h.p. cars supplied through normal trade channels.

In addition, 180 officers of the Department are authorised to use their own privately owned cars.

## SITES AND BUILDINGS

With the continued restriction upon building works during 1949, very little progress was made in the erection and adaptation of premises to meet the additional requirements of the County Council's health services. The erection of five large housing estates at Waltham Cross; Friday Hill, Chingford; Grange Hill, Chigwell; Harold Hill, Romford; and at Loughton Hall by the London County Council, and the development of two New Towns at Harlow and Basildon, as well as the implementation of the Council's proposals under Part III of the National Health Service Act, 1946, will necessitate a large programme of building work as and when circumstances permit, but meantime every endeavour is being made to meet the most urgent needs of the population.

### Health Centres

Twelve additional sites for the erection of Health Centres were inspected and provisionally earmarked.

### Combined Treatment Centres

Negotiations with the Ministry of Health in regard to the erection of prefabricated combined treatment centres at South Hornchurch and on the London County Council estates situated at Friday Hill, Grange Hill and Loughton Hall were continued during the year, and an assurance was received that the necessary authorisations would be forthcoming for the proposed works to be undertaken as soon as security of tenure of the sites was obtained. To meet the urgent needs of the residents on the Hainault Estate, Grange Hill, two houses, Nos. 30 and 32, Elmbridge Road, were, with the co-operation of the London County Council, furnished and equipped, and opened as temporary clinic premises early in January, 1950.

During the year work was commenced on the final stage of adapting premises in Culver Street, Colchester, for use as a combined treatment centre, and schemes were prepared for the adaptation for clinic purposes of premises in Great Dunmow, Leyton and Walthamstow.

### Day Nurseries

Work was commenced early in 1949 on the erection of a prefabricated day nursery for 50 children in Stevens Road, Ilford, to replace an existing day nursery, the site of which was required by its owners, the London County Council, for re-housing purposes. Negotiations were commenced with a view to securing sites for day nurseries in six districts.

### Houses for Staff

Considerable attention was given to the provision of housing accommodation for home nurse-midwives and home nurses, and negotiations were pursued with the owners of 29 properties occupied by this class of officer ; three were acquired and seven leases completed. Application to Local Housing Authorities resulted in the allocation of four houses and flats, and similar accommodation was promised in four more cases. The Minister of Health gave approval in principle to the erection of houses for two home nurse-midwives at Langdon Hills, and similar applications were made in respect of accommodation to be erected at Kirby Cross, Brightlingsea, Tiptree and Chappel.

### Offices

The arrangements for the decentralisation of administration of local health functions under Part III of the National Health Service Act, 1946, have necessitated the provision of Area Offices in four districts, and in this connection negotiations were undertaken for the acquisition of Tomteen House, Grays ; Nash's Dairy, Rayleigh ; and 195, Springfield Road, Chelmsford, to meet the needs of the Health Area administration in South Essex, South-East Essex and Mid-Essex. Similarly, an approach was made to the Wanstead and Woodford Borough Council with a view to the inclusion in plans for proposed new Municipal Offices of a suite of rooms to be leased to the County Council for use by the Health Area staff.

### Decentralisation of Administration

In order to secure the maximum degree of decentralisation of my duties as County Medical Officer of Health and to give the fullest possible responsibility for matters in

connection with the acquisition, leasing and use of properties, including land, for health purposes to the Areas, a new procedure was put into effect from 1st November, 1949. It was designed to reduce to a minimum the delays which unavoidably arose as a result of matters of detail being referred from Area Offices to my Department.

Briefly, the procedure is that after preliminary consultation with me as to the need for the provision, development or other extension of a particular service for which it is proposed to acquire, lease or use property or land, Area Medical Officers are authorised to seek suitable properties in their Area and, after obtaining the preliminary views of the County Architect and the Area Planning Officer, arrange for the property to be included in the register kept by the County Planning Adviser with a view to safeguarding the possible interest of the Health Committee in the property. Thereafter the matter is reported to the Health Area Sub-Committee for approval and, if they so decide, recommendation to the Health Committee for approval in principle, thus giving the Health Committee the opportunity to co-ordinate and integrate the health services generally. After this approval in principle has been obtained, Area Medical Officers approach the Principal County Officers concerned with a view to obtaining full and complete information covering every aspect of the matter, such as architectural (including estimates for repairs and adaptations), financial, planning consents, development charges and equipment. An appropriate report to the Health Area Sub-committee is then prepared in consultation with me and all other County Officers concerned, the only limitation placed upon Area Medical Officers being that they should keep the Clerk of the County Council and me informed of progress and should consult us at once if any difficulty should arise.

## MEDICAL EXAMINATIONS

The medical examination of the staff of the County Council involved an appreciable volume of work during the year under review, no fewer than 1,748 such examinations being undertaken.

Consideration was given to a revision of the arrangements made in accordance with Standing Order 52 which would provide for approved medical officers on the staff of the County Council being authorised to sign medical certificates as well as examine members of the staff on my behalf.

## LABORATORY SERVICE

### Supplementary Laboratory Service

The agreement with the Counties Public Health Laboratories, 66, Victoria Street, London, S.W.1, was continued during the year. Details are in the possession of all local Medical Officers of Health. The arrangement does not include the examination of milk samples from some districts in the centre of the County which are dealt with at the Essex Institute of Agriculture at Writtle, near Chelmsford.

There were 827 examinations of samples of water, 481 of sewage effluents and 2,544 of milk, ice cream and other foods dealt with during the year, the latter being a greater number than in the year 1948. Further details of the sampling of ice cream will be found on page 31.

**Other Laboratory Services**

By Circular letter, dated 19th September, 1949, the Medical Officers of Health of the following County Districts: Brightlingsea Urban District, Clacton Urban District, Colchester Borough, Frinton and Walton Urban District, Harwich Borough, Wes Mersea Urban District, Wivenhoe Urban District, Lexden and Winstree Rural District and Tendring Rural District were informed that the Medical Research Council on behalf of the Ministry of Health is providing a Public Health Bacteriological Laboratory Service throughout England and Wales. Such service is not restricted to the County in which the Laboratory is provided as each Laboratory is intended to cover the area surrounding the Laboratory. Therefore arrangements have been made with Dr. P. H. Martin, Medical Officer in charge of the Public Health Laboratory, Borough General Hospital, Woodbridge Road, Ipswich (Telephone: Ipswich 77261-2), to undertake bacteriological examinations in connection with milk, water, ice cream, swimming bath waters, shellfish, food poisoning, infectious diseases, field work on application, and biological examination of milk. This service is provided free of charge and therefore takes the place of the service which has been provided for many years by the Essex County Council in accordance with the arrangements noted above. This new service for the area in question started on 1st October, 1949.

Similar remarks apply to the following areas :—

| Laboratory. | County Districts. |
|---|---|
| Public Health Laboratory, Borough Sanatorium, Balmoral Road, Southend-on-Sea (Telephone: Southend 45440) (Except biological examination of milk) | Urban Districts of Benfleet, Billericay, Canvey Island, Rayleigh and Thurrock. Rural District of Rochford. |
| Public Health Laboratory, Department of Pathology, Tennis Court Road, Cambridge (Telephone: Cambridge 55526) | Borough of Saffron Walden, Rural District of Saffron Walden. |

Chemical examinations are still carried out by the Counties Public Health Laboratories in accordance with the existing arrangements.

In addition, the bacteriological examination of samples of milk from the County Council's institutions, children's homes and schools and from farms, central depots and in course of delivery to the consumer is carried out at the Essex Institute of Agriculture. In addition Dr. A. L. Sheather, of Chorley Wood, undertakes the biological examination of such samples, and this is also carried out at the Public Health Laboratory, Borough General Hospital, Woodbridge Road, Ipswich.

## MILK SUPPLY

**Milk (Special Designations) Regulations, 1936-1948**

On 1st October, 1949, the Food and Drugs (Milk and Dairies) Act, 1944, was brought into operation by the Food and Drugs (Milk and Dairies) Act, 1944 (Appointed Day) Order, 1949. This brought about the transfer of the duties in regard to designated

ilk producers from County and County Borough Councils to the Ministry of griculture and Fisheries. In these circumstances, the review of work done deals ith the nine months ended 30th September, 1949.

(*a*) LICENCES. The number of licences to produce Tuberculin Tested milk again creased and the decrease in the number of licences to produce Accredited milk ntinued. Comparative figures for 1948 and 1949 are given below :—

| Grade of Milk. | No. of Licences. 1948. | 1949. (nine months). |
|---|---|---|
| Tuberculin Tested .. .. | 485 | 538 |
| Accredited .. .. .. | 581 | 523 |
| Totals .. .. .. | 1,066 | 1,061 |

Below is given a summary of the action taken by the Milk Sub-Committee in nnection with contraventions of the Regulations, more particularly in regard to veral consecutive unsatisfactory samples of milk :—

| | |
|---|---|
| No. of written cautions .. .. .. .. .. | 2 |
| No. of notices of intention to revoke licences .. .. .. | 11 |
| No. of licences revoked .. .. .. .. .. | 6 |
| No. of appeals (unsuccessful) made to Ministry of Health during the nine months .. .. .. .. .. | 2 |

(*b*) SAMPLES OF DESIGNATED MILK. Samples taken from farms and central pots during the nine months ended 30th September, 1949, numbered 2,903.

Every sample was submitted to the Methylene Blue Reduction Test, but samples re also put to the Coliform Bacteria Test during the pre-licence period and when cumstances demanded. The following table summarises the results of the Methylene ue Reduction Test only :—

| *Quarter ended* | *Total.* | *Satisfactory.* *No.* | *per cent.* | *Unsatisfactory.* *No.* | *per cent.* | *(1948).* |
|---|---|---|---|---|---|---|
| 31st March .. .. | 1407 | 1359 | 96.6 | 48 | 3.4 | (3.8) |
| 30th June .. .. .. | 923 | 838 | 90.8 | 85 | 9.2 | (10.2) |
| 30th September .. .. | 573 | 360 | 62.8 | 213 | 37.2 | (21.5) |
| Totals .. .. | 2903 | 2557 | 88.1 | 346 | 11.9 | (11.6) |

It will be seen that the increase in the number of unsatisfactory samples occurred ring the warm summer months.

Advice and assistance was again made available by the Essex Institute of riculture to those licensees who had difficulty in producing satisfactory samples of k.

(*c*) NEW BUILDINGS AND IMPROVEMENTS TO EXISTING BUILDINGS. Much time s spent on advisory work. This included advising on the adaptation and improvent of existing cowsheds, cooling rooms and washing-up rooms, and in the preparation sketch plans and specifications. All this was complementary to the County Health pector's work on the Building Panel of the County Agricultural Executive mmittee.

(*d*) Water Supplies to Farms. The Grant-in-Aid Scheme formulated by the Ministry of Agriculture and Fisheries continued to operate. Every application for assistance was considered by the Water Supplies Panel of the County Agricultural Executive Committee. The County Health Inspector served on this Panel, and by this means kept in touch with the work and was able to advise upon the public health aspects of each scheme.

(*e*) National Milk Testing and Advisory Service. This service provided by the Essex Agricultural Executive Committee was again available. Unsatisfactory producers of ordinary raw milk were reported to and considered by the Milk Production Sub-Committee, upon which the County Council was represented.

### Biological Examinations

During the year, reports were received on 775 samples of milk taken from farms, etc., giving the following results :—

21 inconclusive
742 free from tubercle bacilli
12 (1.6 per cent.) contained tubercle bacilli. (This equalled the percentage for 1948)

Every positive case was reported to the Divisional Inspector of the Ministry of Agriculture and Fisheries.

### Milk-in-Schools Scheme

Endeavours are made to sample the milk supplied by each approved purveyor during each school term. This year, the following samples were obtained at the schools by the Weights and Measures Inspectors, and examined as indicated :—

(*a*) Biological Examinations.

6 inconclusive
257 free from tubercle bacilli
3 (1.2 per cent.) contained tubercle bacilli. (This equalled the percentage for 1948).

(*b*) Bacteriological Examinations. Four hundred and thirty-eight samples were obtained, 60 (13.7 per cent.) failing to pass the prescribed tests. Every unsatisfactory sample was followed up.

### Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulations, 1949

Under these Regulations, the County Council, as from 1st October, 1949, became responsible for the licensing of pasteurisation and sterilisation establishments, the licensing area consisting only of that part of the County for which the County Council is Food and Drugs Authority.

On 1st October, 1949, the control of 12 licensed pasteurising establishments was transferred from the County District Councils concerned to the County Council, the existing licences in respect of these establishments remaining in force until 31st December, 1949. In each case detailed inspections of premises and plants were carried

but, improvements were made and satisfactory samples of milk were obtained. In addition, before the end of the year, two new applications for the use of the special designation "Pasteurised" were received.

During the period 1st October, 1949, to 31st December, 1949, routine samples were taken at pasteurising establishments and submitted to the Phosphatase and Methylene Blue Reduction Tests with the following results :—

| | 1949. Oct. | Nov. | Dec. |
|---|---|---|---|
| (*a*) Phosphatase Test :— | | | |
| No. submitted .. .. .. | 33 | 38 | 46 |
| No. failed .. .. .. | 3 | — | — |
| (*b*) Methylene Blue Reduction Test :— | | | |
| No. submitted .. .. .. | 33 | 38 | 46 |
| No. failed .. .. .. | — | — | — |

## ICE CREAM

In addition to the usual facilities available under the Council's Supplementary Laboratory Scheme at the Counties Public Health Laboratories, 66, Victoria Street, London, S.W.1. (Telephone Victoria 5838/9), Local Sanitary Inspectors of County Districts in the North-East, North-West and South-East portions of the Administrative County submitted as from 1st October, 1949, samples of ice cream to the respective laboratories of the National Public Health Laboratory Service situated at Ipswich, Cambridge and Southend. (See Laboratory Service, page 27). Each laboratory graded every sample by the Methylene Blue Reduction Test and, in the case of samples examined by the Counties Public Health Laboratories, Plate Count, Coliform and B. Coli Tests were also carried out.

As explained in my predecessor's Report for 1947, the Minister of Health in Circular 79/47 drew attention to a report of a Special Sub-Committee which appeared in the Monthly Bulletin for March, 1947, which gave particulars of a form of Methylene Blue Test adapted for testing ice cream. He had been advised that this test of bacterial cleanliness appeared to be the best available for the present purpose. It was simple and cheap to perform, and associated with it were the four grades defined as follows :—

| | | |
|---|---|---|
| Grade 1 .. | Time taken to reduce Methylene Blue .. | 4½ hours or more. |
| " 2 .. | " " " .. | 2½ to 4 hours. |
| " 3 .. | " " " .. | ½ to 2 hours. |
| " 4 .. | " " " .. | 0 hours (i.e. reduction at the end of the pre-incubation period.) |

The Minister suggested that if, out of the four grades recommended, ice cream consistently fails to reach Grades 1 or 2, it would be reasonable to regard this as indicating defects of manufacture or of handling which call for further investigation.

Outside these grades, however, the Counties Public Health Laboratories have again endeavoured to classify each sample as satisfactory or unsatisfactory, the results of the Plate Count and B. Coli Test being used as a guide to reach those conclusions.

Table V on page 100 gives the detailed results for each County District of samples examined by the Counties Public Health Laboratories and National Public Health Laboratories, a summary of which is given below :—

(*a*) Grading by Methylene Blue Reduction Test :—

| | 1949. | Per cent. | 1948. | Per cent. |
|---|---|---|---|---|
| Grade 1 .. | 1,016 | (52.0) | .. 389 | (30.6) |
| Grade 2 .. | 500 | (25.6) | .. 381 | (30.0) |
| Grade 3 .. | 241 | (12.3) | .. 249 | (19.6) |
| Grade 4 .. | 188 | (9.6) | .. 225 | (17.7) |
| Ungraded .. | 10 | (.5) | .. 27 | ( 2.1) |
| Total | 1,955 | | 1,271 | |

(*b*) Judging by Plate Count and B. Coli Test on those Samples Examined by Counties Public Health Laboratories :—

| | 1949. | Per cent. | 1948. | Per cent. |
|---|---|---|---|---|
| Satisfactory .. | 1,633 | (87.3) | .. 1,096 | (86.2) |
| Unsatisfactory .. | 238 | (12.7) | .. 175 | (13.8) |
| Total .. | 1,871 | | 1,271 | |

The above results reveal the continued improvement which took place during 1949.

## FOOD AND DRUGS

I am indebted to the Chief Inspector of Weights and Measures, whose Department is responsible for the enforcement of the Food and Drugs Act, 1938, for the following report :—

The enforcement of the Food and Drugs Act, 1938, aims at the maintenance of pure and wholesome foodstuffs. The definition of " food " is considerably wider than is generally appreciated, in that it covers " any article used as food or drink for human consumption other than drugs or water ".

Certain articles of food have continued in short supply and constant watch has been kept for the sale of substitutes as the genuine article. In other cases an improvement in supply has resulted in an increase in the number of brands and packs on sale. Continuous vigilance has been exercised to see that these comply with the claims made for them.

Through the machinery of the Weights and Measures Department, 1,171 samples of various foods and drugs were procured and submitted to the Public Analyst for analysis. In addition, 1,603 samples of milk were tested in the Laboratory of the Weights and Measures Office in Chelmsford. One hundred and eleven of the samples of milk submitted to the Public Analyst failed to reach the prescribed standard ; 31 contained added water in proportions varying from ½–26 per cent., 73 were deficient in milk fat in extents ranging from 1–28 per cent. and 6 were adulterated with added water and were also deficient in milk fat. One sample was infected with mould.

Of the remaining samples submitted to the Public Analyst, 35 were unsatisfactory. These unsatisfactory samples included the following :—

| | |
|---|---|
| ALMOND PASTE. | This was composed of a substitute known as "Baker's Filler". |
| CHERRY CAKE. | This actually contained coloured and sweetened cherry shapes in place of cherries. |
| BREAD. | A loaf of bread was found to contain a cigarette end and to be unfit for human consumption. |
| VINEGAR. | Two samples were found to be unfit for human consumption. One was contaminated with paraffin, the other contained a dirt sediment and was also deficient in acetic acid. |
| NUTTY RINGS. | A sweetmeat sold under this title was found to be composed of puffed wheat, and contained no nuts. |
| PORK SAUSAGES. | A sample of these sausages was found to be 8 per cent. deficient in meat. |

PROSECUTIONS Prosecutions were undertaken in 30 cases during the year. Some of these concerned the articles mentioned above. Six were concerned with the improper sale of horse-flesh. The majority of the remaining cases were instituted in respect of milk which was below the required standards.

During the year, officers of the Department collaborated with the Police in investigating the sale of unsound walnuts in a market within the County. Analysis of a sample of these walnuts showed some 79 per cent. to be unfit for human consumption.

During the year, the Urban District of Hornchurch became its own Food and Drugs Authority and as a consequence, as from the 1st November, 1949, officers of this Department ceased to administer the Food and Drugs Act, 1938, within this Urban District.

## RURAL WATER SUPPLIES AND SEWERAGE ACT, 1944

This Act placed at the disposal of the Minister of Health a sum of £15,000,000 to ssist schemes prepared by Local Sanitary Authorities for the provision or improvement f water supply and for the provision of sewerage facilities in rural localities in England nd Wales.

Under Section 2 of the Act, if the Minister undertakes to make a contribution for ther a water or sewage scheme, the County Council concerned is also required to ontribute. Consequently, Local Authorities must obtain for submission to the inistry of Health the County Council's observations on all schemes for which applitions are to be made for grants.

Up to 31st December, 1949, the Essex County Council had been asked for their bservations upon schemes submitted by three Borough, six Urban District and even Rural District Councils and estimated to cost a total of £2,161,000.

At the time of writing, the Ministry of Health has undertaken provisionally to ocate lump sum grants towards the cost of the following schemes :—

| | Estimated Cost. | Provisional Grant by Ministry of Health. |
|---|---|---|
| | £ | £ |
| Tendring Rural Western Area Water Supply Scheme .. .. .. .. | 76,400 | 35,000 |
| Chelmsford Rural Water Mains Extension Scheme .. .. .. .. | 44,212 | 20,000 |
| Chelmsford Rural Sewerage Scheme .. .. | 55,934 | 23,000 |
| Chelmsford Rural Water Mains Extension Scheme .. .. .. .. | 12,235 | 4,000 |
| Chelmsford Rural Water Mains Extension Scheme .. .. .. .. | 1,726 | 600 |
| Lexden and Winstree Rural Water Supply Scheme .. .. .. .. | 12,750 | 2,700 |
| Lexden and Winstree Rural Sewerage Scheme | 34,000 | 5,000 |
| Tendring Rural Sewage Disposal Scheme .. | 44,453 | 19,000 |
| Dunmow Rural Sewerage Scheme .. .. | 21,128 | 13,000 |
| Lexden and Winstree Water Supply Scheme | 15,300 | 4,500 |
| Dunmow Rural Water Supply Scheme .. | 53,304 | 20,000 |
| Tendring Rural Water Mains Extension Scheme | 8,695 | 2,200 |
| Epping Rural Sewerage and Sewage Disposal Scheme .. .. .. .. | 5,120 | 4,000 |
| Epping Rural Sewerage and Sewage Disposal Scheme .. .. .. .. | 5,100 | 4,000 |
| Epping Rural Water Supply Scheme .. | 5,705 | 1,000 |
| Chelmsford Rural Water Mains Extension Scheme .. .. .. .. | 629 | 200 |
| Ongar Rural Water Supply Scheme .. .. | 39,129 | 7,300 |
| Ongar Rural Water Mains Extension Scheme .. | 6,820 | 2,000 |
| Lexden and Winstree Rural Water Mains Extension Scheme .. .. .. | 3,300 | 850 |

## PUBLIC HEALTH ACT, 1936. SECTION 307

In accordance with the provisions of the County Council's approved Scheme to give effect to Section 307 of the Public Health Act, 1936, and the Rural Water Supplies and Sewerage Act, 1944, the County Council agreed to make to the undermentioned Rural District Councils payment of the following amounts, being the approved estimated grants payable in respect of the financial year, 1949–50 :—

| Rural District Council. | Amount. £ |
|---|---|
| Braintree .. .. .. .. | 5,283 |
| Dunmow .. .. .. .. | 4,130 |
| Epping .. .. .. .. | 1,443 |
| Halstead .. .. .. .. | 1,106 |
| Lexden and Winstree .. .. .. | 1,794 |
| Ongar .. .. .. .. .. | 1,094 |
| Rochford .. .. .. .. | 1,852 |
| Saffron Walden .. .. .. .. | 3,064 |
| Tendring .. .. .. .. | 1,442 |
| Total .. .. .. | £21,208 |

## SEWAGE WORKS AND RIVERS POLLUTION

The table below gives details of the samples of sewage and trade effluents obtained during the year involving 538 visits and the taking and examining of 380 samples. The results obtained revealed that 156 or 41.1 per cent. were unsatisfactory, as compared with 44.0 per cent. in 1948.

Copies of all results are supplied to the County District Councils or to the private firms concerned, and observations are asked for in unsatisfactory cases. Improvements, mostly of a minor character, have been secured at some of the sewage works. Schemes for major improvements have been prepared or are in course of preparation. Most of these, however, are awaiting approval by the Ministry of Health.

| *Catchment Area.* | *Sewage Works.* | *Sanitary District.* | *No. of Visits.* | *Samples taken.* *Satisfactory or on border line.* | *Unsatisfactory.* | *Total.* |
|---|---|---|---|---|---|---|
| Beam | Romford and Hornchurch Jt. | Romford B. and Hornchurch U. | 4 | 2 | 8 | 10 |
| Blackwater | Bocking | Braintree and Bocking U. | 4 | 3 | 1 | 4 |
| Do. | Coggeshall | Braintree R. | 5 | 1 | 3 | 4 |
| Do. | Kelvedon | Do. | 5 | 4 | — | 4 |
| Do. | Silver End | Witham U. | 4 | 4 | — | 4 |
| Do. | Tillingham | Maldon R. | 2 | — | 1 | 1 |
| Do. | Witham | Witham U. | 6 | 2 | 3 | 5 |
| Brain | Braintree | Braintree and Bocking U. | 7 | — | 5 | 5 |
| Do. | White Notley | Braintree R. | 4 | 4 | — | 4 |
| Cam | Newport | Saffron Walden R. | 5 | 2 | 1 | 3 |
| Do. | Saffron Walden | Saffron Walden B. | 4 | — | 5 | 5 |
| Chelmer | Chelmsford | Chelmsford B. | 3 | 2 | 1 | 3 |
| Do. | Dunmow | Dunmow R. | 6 | — | 4 | 4 |
| Do. | Felsted | Do. | 7 | 3 | 1 | 4 |
| Do. | Thaxted | Do. | 5 | — | 4 | 4 |
| Colne | Earls Colne | Halstead R. | 4 | 3 | — | 3 |
| Do. | Halstead | Halstead U. | 5 | 1 | 3 | 4 |
| Do. | Layer Breton | Lexden and Winstree R. | 3 | — | — | — |
| Do. | Sible Hedingham | Halstead R. | 4 | — | 2 | 2 |
| Do. | Tiptree | Lexden and Winstree R. | 6 | 5 | — | 5 |
| Do. | Great Bentley | Tendring R. | 5 | — | 4 | 4 |
| Crouch | Outwood Common | Billericay U. | 4 | 3 | 1 | 4 |
| Do. | Laindon | Do. | 4 | 1 | 3 | 4 |
| Do. | Wickford | Do. | 1 | — | — | — |
| Do. | Wickford (Louvaine Avenue) | Do. | 4 | 2 | 2 | 4 |
| Holland Brook | Thorpe-le-Soken | Tendring R. | 5 | 4 | — | 4 |
| Ingrebourne | Brentwood | Brentwood U. | 10 | 5 | 5 | 10 |
| Kirby Creek | Kirby-le-Soken | Frinton and Walton U. | 4 | 1 | 3 | 4 |
| | Carried forward | | 130 | 52 | 60 | 112 |

| Catchment Area. | Sewage Works. | Sanitary District. | No. of Visits. | Samples taken. Satisfactory or on border line. | Unsatisfactory. | Total. |
|---|---|---|---|---|---|---|
| | Brought forward | .. .. | .. 130 | 52 | 60 | 112 |
| Mardyke | Bury Farm | Hornchurch U. | 4 | 3 | 1 | 4 |
| Do. | South Ockendon | Thurrock U. | 4 | 4 | — | 4 |
| Do. | Orsett | Do. | 5 | 1 | 3 | 4 |
| Do. | Thorndon Park Estate (Southern) | Brentwood U. | 4 | 4 | — | 4 |
| Ramsey | Ramsey | Tendring R. | 4 | — | 4 | 4 |
| Do. | Dovercourt | Harwich B. | 6 | — | 5 | 5 |
| Roach | Butlers Farm Camp, Shopland | Rochford R. | 5 | 3 | 1 | 4 |
| Do. | Rayleigh East | Rayleigh U. | 3 | — | 3 | 3 |
| Do. | Great Stambridge | Rochford R. | 3 | 2 | — | 2 |
| Do. | Great Wakering | Do. | 3 | 2 | — | 2 |
| Roding | Abridge | Ongar R. | 5 | 4 | — | 4 |
| Do. | Chigwell | Chigwell U. | 6 | 4 | — | 4 |
| Do. | Chigwell Row | Do. | 5 | — | 1 | 1 |
| Do. | Epping Southern | Epping U. | 6 | 1 | 3 | 4 |
| Do. | Moreton, New Council Houses | Ongar R. | 3 | — | 2 | 2 |
| Do. | Moreton | Do. | 3 | — | 3 | 3 |
| Do. | North Weald | Epping R. | 4 | 4 | — | 4 |
| Do. | Stanford Rivers | Ongar R. | 5 | 4 | — | 4 |
| Do. | Theydon Bois | Epping R. | 5 | 4 | — | 4 |
| Do. | Theydon Mount Council Houses | Ongar R. | 2 | — | — | — |
| Do. | Wanstead | Wanstead and Woodford B. | 5 | 3 | 1 | 4 |
| Do. | Woodford (East) | Do. | 5 | 4 | — | 4 |
| Sea | Great Holland | Frinton and Walton U. | 5 | — | 3 | 3 |
| Do. | St. Osyth (East) | Tendring R. | 5 | 2 | 2 | 4 |
| Do. | St. Osyth (West) | Do. | 5 | — | 4 | 4 |
| Do. | Little Oakley | Do. | 5 | 4 | — | 4 |
| Stort | Hatfield Broad Oak | Dunmow R. | 4 | 3 | — | 3 |
| Do. | Hatfield Heath | Do. | 4 | 3 | — | 3 |
| Stour | Dedham | Lexden and Winstree R. | 4 | 1 | 2 | 3 |
| Do. | Lawford | Tendring R. | 2 | — | 2 | 2 |
| Do. | Parkeston | Do. | 3 | — | 2 | 2 |
| Do. | Steeple Bumpstead | Halstead R. | 5 | 1 | — | 1 |
| Ter | Hatfield Peverel | Braintree R. | 6 | 2 | 1 | 3 |
| Wid | Great Burstead and Mountnessing | Billericay U. | 4 | 3 | 1 | 4 |
| Do. | Ingatestone | Chelmsford R. | 4 | 2 | 2 | 4 |
| Do. | Mountnessing | Do. | 3 | — | 2 | 2 |
| | Carried forward | .. .. | .. 284 | 120 | 108 | 228 |

| Catchment Area. | Sewage Works. | Sanitary District. | No. of Visits. | Samples taken. Satisfactory or on border line. | Unsatisfactory. | Total. |
|---|---|---|---|---|---|---|
| | Brought forward | .. .. | .. 284 | .. 120 | 108 | 228 |
| Wid .. | Shenfield and Hutton, etc. | Brentwood U. | .. 4 | .. 4 | — | 4 |
| Do. .. | Thorndon Park Estate (Northern) | Do. | .. 4 | .. 3 | 1 | 4 |
| | Other samples, including Aerodromes, Military Camps, private sewage works, rivers, streams, ditches, etc. .. | .. .. | .. 205 | .. 91 | 33 | 124 |
| | Trade effluents .. | .. .. | .. 41 | .. 6 | 14 | 20 |
| | Total .. | .. .. | .. 538 | .. 224 | 156 | 380 |

## RURAL HOUSING.

The Joint Advisory Committee on Rural Housing, which held its first meeting in 1944, met on 18th February and 28th July, 1949.

During the year a Special Sub-Committee was appointed to consider and examine the quarterly reports furnished by the constituent Rural District Councils in relation to housing and to report to the Joint Committee thereon with particular regard to the practicability and desirability of formulating revised standard forms of quarterly reports. The Sub-Committee met on 13th October, 1949, and agreed to advise the Joint Committee that the present forms of quarterly report be revised with a view to reducing to a minimum the amount of information which should be provided by the Rural District Councils. These new forms will be brought into use in 1950.

The Sub-Committee also extended its discussions to include the functions of the Joint Advisory Committee and expressed the opinion that the constituent Rural District Councils should be encouraged to refer housing problems to the Joint Committee for advice, assistance or support.

## THE COUNTY AMBULANCE SERVICE

### Vehicles

The year 1949 was one of gradual expansion in the County Ambulance Service. The first object was to reorganise the ambulance fleet as, at the commencement of the year, the Service was operating largely with vehicles transferred from hospitals and County District Councils. Many of these vehicles were somewhat aged and out of date and orders were placed in January for new ambulances. Deliveries commenced from March onwards and, in all, some 52 new ambulances and 12 utility type sitting case

vehicles were put into service during the year. The following Table shows, according to age, the ambulances with which the Service, at the beginning of the year, had to fulfil its statutory duties under the National Health Service Act, 1946 :—

| Less than 5 years old. | 6 to 10 years old. | 11 to 15 years old. | 16 to 20 years old. | Over 20 years old. | Total. |
|---|---|---|---|---|---|
| 17 | 16 | 40 | 8 | 1 | 82 |

The total vehicle strength at 31st December, 1949, was 104 ambulances and 17 sitting case vehicles operating from 28 ambulance stations. In addition, 21 ambulances and 6 sitting case vehicles were operated on behalf of the County Council under agency agreements.

### Premises

In a number of instances the premises utilised as ambulance stations were entirely unsuitable for the purpose. During the year the position in this regard did not materially improve, chiefly owing to the lack of suitable alternative accommodation and sites and the need for economy in capital expenditure.

Personnel accommodation remains very restricted and in many cases ambulance vehicles have to stand in the open, although at Barking, Dagenham, Laindon, Loughton, Maldon, Saffron Walden, Waltham Abbey and Witham, the County Fire Brigade has, as a temporary measure, made provision for ambulance personnel and, where available, cover for the vehicles. In other areas negotiations proceeded for the conclusion of tenancy agreements in respect of existing premises suitable for temporary accommodation and three new stations were opened at Braintree, Thundersley and Waltham Abbey, resulting in the termination of agency agreements in those areas.

### Equipment

Considerable attention has been paid to the provision of equipment both for ambulance stations and vehicles, including the supply of resuscitation apparatus which has enabled many serious cases to be conveyed to hospital without any worsening of their condition. In some instances it has been instrumental in saving life.

### Hospital Car Service

The arrangements with the Hospital Car Service were continued throughout the year and, at the 31st December, approximately 200 cars were in operation. During the twelve months under review this Service carried a total of 35,565 patients and covered 1,067,352 miles.

### Mileage

In the directly operated Service and the Service operated under agency arrangements, the year was marked by a steady increase in the number of patients carried and the mileage covered. This trend will be observed from the following table of mileage and cases conveyed by the directly operated Service :—

| Month. | Total Number of Patients. | | Accidents and other emergency calls. | | Total mileage. | |
|---|---|---|---|---|---|---|
| | Ambulances. | Cars. | Ambulances. | Cars. | Ambulances. | Cars. |
| January .. | 10,297 | 1,750 | 3,063 | 60 | 100,928 | 9,224 |
| February .. | 10,271 | 713 | 2,828 | 91 | 94,586 | 6,524 |
| March .. | 11,763 | 1,473 | 4,119 | 203 | 105,766 | 10,399 |
| April .. | 12,075 | 1,346 | 3,127 | 27 | 108,537 | 11,686 |
| May .. | 12,775 | 1,769 | 3,012 | 36 | 116,343 | 14,005 |
| June .. | 12,027 | 1,761 | 2,972 | 53 | 135,394 | 15,416 |
| July .. | 13,071 | 1,683 | 3,363 | 44 | 133,875 | 17,363 |
| August .. | 12,766 | 1,959 | 5,599 | 108 | 130,766 | 11,616 |
| September .. | 13,021 | 2,080 | 3,296 | 60 | 136,673 | 9,561 |
| October .. | 16,840 | 2,019 | 5,517 | 44 | 141,339 | 11,135 |
| November .. | 14,964 | 2,060 | 3,059 | 42 | 146,381 | 11,495 |
| December .. | 14,673 | 1,817 | 3,443 | 41 | 141,785 | 13,062 |
| TOTAL .. | 154,543 | 20,430 | 43,398 | 809 | 1,492,373 | 141,486 |

During January the total number of patients conveyed by both the directly operated Service and by the agency services (excluding the Hospital Car Service), was 12,738 and the total distance covered was 129,841 miles. These figures may be compared with a total of 17,434 patients carried over a distance of 170,008 miles in December, representing an increase of approximately 37 per cent. in the number of patients carried, and of about 31 per cent. in the mileage covered. The total number of patients carried throughout the year was 185,313 and the overall distance travelled by ambulance vehicles was 1,898,267 miles.

It is of interest to note that the number of patients carried increased in greater proportion to the increase in mileage, and is an indication of a gradual gain in efficiency in the Service as a result mainly of the operation of more suitable and up-to-date vehicles. This general increase in the volume of work carried out by the County Ambulance Service can be put down to a number of causes, one of the most significant of which seems to be the shorter period of treatment of patients in hospital, resulting in a greater number of cases being dealt with by those hospitals. This also entails, in the majority of instances, the attendance of persons recently discharged from hospital at out-patient clinics, involving ambulance or sitting case transport, whereas previously the treatment might have been completed in hospital before discharge. An increased knowledge of the Health Services available to the public has also resulted in a larger demand for out-patient treatment and hospitals have, in general, found it necessary to increase the number of out-patient and specialist clinics with the resulting increased demand for ambulance transport which must be met. This fact has served to underline the paramount importance of economy in the use of ambulances and consequently a

conference on this subject was held during the year. This conference was attended by representatives of hospital management committees in the area, and it is hoped that the resulting suggestions which may be put forward by those bodies will help in keeping down mileage and in preventing abuses of the Ambulance Service.

### Combination with Fire Brigade

Consideration was given during the year to the question of the proposed combination of the County Fire and Ambulance Services. A conference was held in August from which it was apparent that the principles governing the operation of the Fire and Ambulance Services could not be reconciled. It was pointed out that the Ambulance Service acts as a transport auxiliary of the Health Services and that it would be a serious disadvantage if the close association of the Service with doctors, nurses and other medical auxiliaries were to be weakened by divorcing it from the Health Department. Another major factor in this connection was the interchangeability of personnel between the two services. It was felt that, if personnel were to be interchangeable, there would be less opportunity for constant practice in the handling of patients so as to avoid pain and discomfort and to obviate aggravating their condition, and consequently less skill in this most important function. There might also be a tendency to recruit firemen rather than suitable ambulance personnel. On the other hand, it was felt that, if personnel were not to be interchangeable, the only result of combining the two Services would be to create an ambulance section within the Fire Service with all its attendant disadvantages, and no advantage over an Ambulance Service within the Health Department.

As a result of these and other points raised at the conference it was decided that these Services should not be combined but that, as an interim measure, the existing use of Fire Brigade divisional controls for communications purposes should be continued. It was also agreed that the Ambulance Service should have the continued use, on a short-term basis, of the eight fire stations previously mentioned for the accommodation of ambulances and personnel.

These arrangements have proved operationally adequate as a temporary measure and the County Ambulance Service has throughout the year enjoyed the continued co-operation of the County Fire Service.

### Communications

It was recognised, however, that these temporary arrangements did not make for the greatest possible efficiency in the operation of the Ambulance Service and consequently, in November, preliminary consideration was given to a scheme for the reorganisation of the Service to include provision for central controls to obviate the necessity for utilising the organisation of the County Fire Service. Preliminary consideration was also given to the possibility of introducing a system of two-way radio communication throughout the County Ambulance Service. At the end of the year, these matters were receiving more detailed consideration with a view to appropriate recommendations being placed before the Ambulance Sub-Committee of the Health Committee.

A scheme was introduced in November to deal with the concentration of ambulance vehicles at a major disaster. The scheme provides for the immediate despatch of si

ambulances to the scene of the incident with instructions to the crew of the first vehicle to inform Control of the situation and the estimated number of casualties. At the same time as the vehicles move into action a senior member of the Ambulance staff will proceed immediately to the incident and set up a control point and a further ten ambulances will be mobilised to stand by ready to proceed at a moment's notice. The scheme includes provision for liaison with neighbouring hospitals, the County Fire Service and the Police, and the mobilisation of voluntary and works ambulances as considered necessary.

## Staff

In view of the nature of the duties carried out by Ambulance Driver/Attendants, it was considered that a definite standard of medical fitness should be maintained throughout the Service. Consequently, a standard of medical examination was introduced in April somewhat higher than that normally utilised for other classes of employees and including vision and colour-vision tests. This examination is now used in respect of all new entrants to the Service.

Great importance is attached to attaining a high standard of driving ability, and to this end every encouragement was given to personnel to enter the Safe Driving Competitions organised by the Royal Society for the Prevention of Accidents. Arrangements were also put in hand to ensure that, in future years, every member of the Service who is eligible is entered by the County Council for these competitions.

The first permanent County Ambulance Officer was appointed on 1st July, 1949, and later an Assistant County Ambulance Officer was also appointed. The staffing position generally in the Service also improved. At 31st December there was a total strength of 12 Supervisors, 15 Head Drivers and 311 Driver/Attendants. In addition, four telephonists were employed at the Ilford Ambulance Station.

## Reciprocal Arrangements

The question of ambulance cover for the border areas of the Administrative County has continued to receive attention and reciprocal arrangements were concluded with neighbouring local health authorities. The majority of these arrangements were, however, varied as a result of the implementation of Section 24 of the National Health Service (Amendment) Act, 1949, which came into force on 16th December whereby "continuing need" so far as neighbouring authorities are concerned, now applies up to a period of three months. The effect of this amendment is that where a patient is returned home from a hospital outside the County, having been in that hospital for less than three months, it is the responsibility of the County Ambulance Service either to arrange the necessary transport or, by agreement with the neighbouring authority concerned, to pay for the journey. Whilst the reverse procedure also applies, it is nevertheless anticipated that this may result in increased charges being received from neighbouring authorities, particularly having regard to the number of hospitals in the London, Middlesex and Hertfordshire areas which cater for Essex patients. In this connection, as a result of negotiations carried on by the County Councils Association and the Association of Municipal Corporations, standardised charges were brought into force in respect of journeys carried out on behalf of other local health authorities.

**Scope of Service**

It is, of course, impossible in a report of this nature to detail all the unusual or outstanding cases dealt with from day to day, but it is of interest to note that within the Administrative County of Essex the Ambulance Service deals from time to time with almost every type of case which may be encountered throughout the whole country. The service covers not only the densely populated south-western area (which includes a considerable proportion of the Metropolitan Police district) and the sparsely inhabited rural areas of the County, but also certain special areas which are not encountered by many other similar services. These include the port and industrial region on the north bank of the River Thames and the port of Harwich; long stretches of sea coast, saltings and marshlands where it is sometimes necessary for stretcher cases to be carried up to two miles or more before reaching the ambulance; the main traffic arteries from London to the East Coast and numerous holiday resorts where, during the season, the floating population may be as much as four or five times the normal population. In addition, there are several areas in the County which contain a considerable mileage of unmade and often unnamed roads and where ambulance crews experience great difficulty not only in locating patients' homes but also in taking an ambulance within reasonable distance, particularly during the winter months when these roads become little more than quagmires.

Two incidents which occurred during the year are, however, worthy of mention and indicate the varied circumstances encountered by ambulance crews in the course of their duties. The first incident occurred at Clacton-on-Sea during September when a call was received from East Beach to attend a case of drowning. On arrival at the case, the ambulance crew immediately applied artificial respiration and continued for over half an hour, when breathing commenced. The crew enlisted the services of the Police and bystanders to assist in promoting circulation and when breathing became more normal the patient was conveyed to hospital where she was placed in an iron lung and subsequently recovered.

The other incident concerned a cardiac patient who had to be removed from South Woodham to the Chelmsford and Essex Hospital during November. On arrival at South Woodham, the ambulance crew found that the patient's home was in a flooded area and that a bridge on the road had been washed away. The only alternative way of reaching the house was by a causeway some two feet high above the flooded area. Whilst the crew were in the house the floods were rising and eventually completely submerged the causeway. Using the ambulance as a mark, the crew had to wade some three-quarters of a mile carrying a stretcher patient who needed very careful handling. During the march, one member of the crew injured his foot, and there was the constant danger of slipping down either side of the submerged causeway. By the time the ambulance was reached, the water had risen to the top step, but the patient was loaded without incident and conveyed to hospital.

**Co-operation with Voluntary Bodies**

It should be stated that throughout the period under review the County Ambulance Service has enjoyed the full co-operation of the Home Service Ambulance Department of the British Red Cross Society and Order of St. John of Jerusalem Joint Organisation, and the assistance and support of that body has been greatly appreciated.

# SECTION III—CARE OF MOTHERS AND YOUNG CHILDREN

THE County Council is now the Authority for the whole of the Administrative County and, in accordance with the Council's policy of decentralisation, certain of the services which previously had been dealt with centrally were delegated during the year to the Health Areas concerned, and it is hoped that by 1950 complete decentralisation will have been established.

In the six large Boroughs adjacent to London, all those services which they were providing as autonomous Welfare Authorities prior to 5th July, 1948, were continued on behalf of the County Council under the scheme of decentralisation.

## Child Welfare Centres

The Child Welfare Centre continues to play a very important part in the Health Service; by the end of the year 64,042 children had attended 757.5 sessions of 216 centres which were in operation during the year.

The following new Child Welfare Centres were established during the year :—

| | |
|---|---|
| *North-East* | St. John's Hall, Ipswich Road, Colchester |
| | Village Hall, Messing |
| *Mid-Essex* | All Saints Church, Boarded Barns, Chelmsford |
| | Village Hall, Great Waltham |
| | Baptist Chapel, Springfield |
| | Village Hall, Great Leighs |
| | Congregational Hall, Margaret Roding |
| | The Hut, Abbess Roding |
| *Forest* | Parish Church Hall, The Ridgeway, Chingford |
| *Walthamstow* | West Avenue Welfare Centre, Walthamstow |

In areas where the numbers do not justify the establishment of a Child Welfare Centre, weighing centres are in operation and it will be appreciated that there is a certain amount of value from a health point of view in such an arrangement as it enables village mothers to meet the Health Visitor at least once a month. In addition schemes are in operation, particularly in the rural areas, for the conveyance of mothers and children to the nearest Child Welfare Centre. At most Centres in the County voluntary workers are in attendance and at some of these Voluntary Committees have been formed. These voluntary efforts are of the utmost importance, and every endeavour is made to stimulate such local efforts and to encourage this work not only in relation to Child Welfare Centres but in all spheres of the Health Services.

In a reference to this voluntary work the Acting Area Medical Officer for North-East Essex makes the following interesting comment :—

> " One special aspect of clinic work requires comment. It is impossible especially in the villages, to provide the full staff necessary from among the salaried staff of the Authority, and much reliance has to be placed upon local voluntary workers to help with the non-professional duties of the Centre. The countryside tradition of neighbourliness is seen at its best in many village centres where the work could not be undertaken at all if it were not for these unselfish people who are drawn together from different social classes by a common purpose ".

The Acting Area Medical Officer for the Borough of Barking estimates that of the children born in Barking during the year over 90 per cent. attended Child Welfare Centres, an indication that the mothers in the Barking Area are " Centre " minded. In the North-East Area the Acting Area Medical Officer indicates that about 85 per cent. of babies born in the Area attend Child Welfare Centres during their first year of life.

In some Areas the buildings used for Centre purposes are far from ideal, and where possible every endeavour is being made to provide alternative accommodation. Difficulties, however, present themselves, particularly in the more rural areas where in most cases it is desirable for the Centre to be situated in the village but where really suitable premises are not always available. As far as the mothers are concerned a mediocre building on the spot is better than an excellent building some miles away.

During the year it was found necessary to close the Combined Treatment Centre at Chingford owing to structural defects but arrangements were made for the various clinics to be held at other premises until alternative accommodation could be provided.

**Provision of Milk, Nutrients and Medicaments**

The facilities provided by the Ministry of Food in regard to the distribution of orange juice, cod liver oil and Vitamin A and D tablets continued to operate at the majority of the Child Welfare Centres, the work of distribution being undertaken by the Health Visitors and Voluntary Workers.

The Ministry of Food have supplied the following information relating to the issue of vitamins in the Administrative County :—

| | | |
|---|---|---|
| Orange Juice (Vitamin C) | .. .. | 2,023,313 bottles |
| Cod Liver Oil (Vitamin A & D) | .. | 478, 977 bottles |
| A & D Tablets (Vitamin A & D) | .. | 118,416 packets |

The administration of the scheme for the supply of nutrients and medicaments has continued, and particulars of the types available are given below :—

| List of Medicaments. | List of Nutrients. |
|---|---|
| Adexolin Liquid | Bemax |
| Fersolate | Cow and Gate, Chocolate |
| Mist. Ferri et Ammon. Cit. | Cow and Gate, Full Cream |
| Cod Liver Oil and Malt | Cow and Gate, Half Cream |
| Cod Liver Oil Emulsion | Cow and Gate, Humanised |
| Kalzana or other Sod. Calc. Lactate Tablets | Farex |
| Sod. Cit. Tablets | Glucodin |
| Milk of Magnesia | Lactogol |
| Ostocalcium | Lactogen |
| Vitamin C Tablets (5 gr. and 25 gr.) | Midlothian Oat Food |
| Marmite | Ostermilk No. 1 |
| Past. Zinc Co. | Ostermilk No. 2 |
| Past. Zinc with H.O.F. 2 per cent. | Robinson's Groats |
| Ung. Hyd. Ox. Flav. | Trufood, Humanised |
| Ung. Boric | Trufood, Follow-on |
| Lot. Calamin | Virol |
| | Colact |

| List of Medicaments. | List of Nutrients. |
|---|---|
| Lot. Rub. B.P.C. | Scott's Baby Cereal (Twin Pack) |
| Lot. Calamin with Phenol 2 per cent. | Scott's Baby Cereal |
| Ung. Penicillin (not to be used outside Clinic) | |
| Maltoline with Iron | |
| Maltoline | |

## Dental Treatment and Dentures

Although every endeavour has been made to ensure that expectant and nursing mothers and children of pre-school age can obtain priority dental treatment, the shortage of dental surgeons continues to present the greatest difficulty. It is a matter of regret that instead of being able to expand the priority dental service it was necessary to curtail it within the limits of the dental staff at our disposal.

At the request of the North-East Metropolitan Regional Hospital Board, arrangements have been in operation since 5th July, 1948, for members of the dental staff in the employ of the County Council to visit, as and when necessary, patients requiring dental care in hospitals. It is anticipated, however, that by 1950 the Board will have completed their own arrangements for the dental care of such patients and the County dental staff will then be able to concentrate entirely on the dental care of the priority classes, although this will in no way provide a full comprehensive service.

The following particulars give information as to the number of cases dealt with, together with the various types of treatment carried out :—

| | Expectant Mothers. | Nursing Mothers. | Children under 5 years. |
|---|---|---|---|
| (1) No. of Patients— | | | |
| (*a*) Examined .. .. | 2,043 .. | 937 .. | 2,455 |
| (*b*) Needing Treatment .. | 1,984 .. | 882 .. | 2,374 |
| (*c*) Treated .. .. | 1,925 .. | 896 .. | 2,357 |
| (*d*) Made dentally fit .. | 1,285 .. | 687 .. | 2,144 |
| (2) No. of Teeth extracted— | | | |
| (*a*) Permanent .. .. | 4,362 .. | 1,546 .. | — |
| (*b*) Temporary .. .. | 3 .. | — .. | 3,180 |
| (3) No. of Teeth filled— | | | |
| (*a*) Permanent .. .. | 2,021 .. | 826 .. | 1,996 |
| (*b*) Temporary .. .. | — .. | — .. | — |
| Inlays .. .. .. | 1 .. | — .. | — |
| Crowns .. .. .. | 1 .. | — .. | — |
| (4) No. of Anæsthetics Administered— | | | |
| (*a*) Local .. .. | 432 .. | 236 .. | 111 |
| (*b*) General .. .. | 1,073 .. | 360 .. | 1,461 |
| (5) Prophylactic Treatment and other Operations .. .. | 944 .. | 511 .. | 255 |

| | Expectant Mothers. | Nursing Mothers. | Children under 5 years. |
|---|---|---|---|
| (6) Scalings or Scaling and Gum Treatment .. .. | 609 .. | 292 .. | 181 |
| (7) Silver Nitrate Treatment .. | 16 .. | 10 .. | 1,258 |
| (8) Dressings .. .. | 431 .. | 218 .. | 340 |
| (9) No. of x-ray Examinations.. | 42 .. | 27 .. | 2 |
| (10) No. of Dentures— | | | |
| (*a*) Provided .. .. | 246 .. | 261 .. | — |
| (*b*) Repaired .. .. | 22 .. | 22 .. | — |
| (*c*) Remakes .. .. | 3 .. | 4 .. | — |
| (11) Other Treatment .. .. | 792 .. | 780 .. | 221 |

## Specialist Services

Although the responsibility for the provision of hospital and specialist treatment is that of the Regional Hospital Boards, the arrangements in connection with the specialist services were in the main still being administered by the County Council. Negotiations with the Regional Hospital Boards for the transfer of responsibility for the specialist services were still proceeding at the end of the year.

## Care of Premature Infants

The number of notifications received relating to babies having a birth weight of 5½ lbs. or less, was 888, including those born at home and those born in hospitals or nursing homes.

The following table gives particulars relating to each Area, together with the incidence of prematurity expressed as the number of premature live births notified per 1,000 registered live births :—

| Health Area. | Live Premature Births. At Home. | In Hospital or Nursing Home. | Per 1,000 Registered Live Births. |
|---|---|---|---|
| North-East Essex .. .. | 41 .. | 111 .. | 56 |
| Mid-Essex .. .. .. | 64 .. | 41 .. | 30 |
| South-East Essex .. .. | 30 .. | 2 .. | 19 |
| South Essex .. .. | 52 .. | 43 .. | 26 |
| Forest .. .. .. | 28 .. | 35 .. | 23 |
| Romford .. .. .. | 6 .. | 39 .. | 34 |
| Barking .. .. .. | 18 .. | 51 .. | 52 |
| Dagenham .. .. .. | 60 .. | 17 .. | 39 |
| Ilford .. .. .. | 20 .. | 85 .. | 40 |
| Leyton .. .. .. | 30 .. | 36 .. | 40 |
| Walthamstow .. .. | 16 .. | 63 .. | 43 |
| Total .. .. | 365 .. | 523 .. | 36 |

On the 19th February, 1949, the Ministry of Health issued Circular L.H.A.L. 1/49 requesting more accurate information, particularly in regard to the survival rate in relation to the weight at birth.

Similar information is obtained by the Ministry from hospitals in respect of premature babies born in the hospital or admitted to the hospital after birth, and the following table relates only to babies born at home or in private Nursing Homes :—

| | Born at Home | | | | | | |
|---|---|---|---|---|---|---|---|
| | | *Nursed entirely at Home* | | | | | |
| | *Transferred to Hospital* | *Died in first 24 hours* | *Died on 2nd–7th day* | *Died on 8th–28th day* | *Survived 28 days* | *Total* | *Grand Total* |
| Under 3 lbs. .. | 8 | 3 | 2 | — | 5 | 10 | 18 |
| 3–4 lbs. .. | 20 | 4 | 1 | — | 19 | 24 | 44 |
| 4–5½ lbs. .. | 29 | 4 | 4 | 2 | 270 | 280 | 309 |
| Total .. | 57 | 11 | 7 | 2 | 294 | 314 | 371 |

| | Born in Private Nursing Homes | | | | | | |
|---|---|---|---|---|---|---|---|
| | | *Nursed entirely in Private Nursing Homes* | | | | | |
| | *Transferred to Hospital* | *Died in first 24 hours* | *Died on 2nd–7th day* | *Died on 8th–28th day* | *Survived 28 days* | *Total* | *Grand Total* |
| Under 3 lbs. .. | — | 1 | — | — | 3 | 4 | 4 |
| 3–4 lbs. .. | — | 1 | — | — | 1 | 2 | 2 |
| 4–5½ lbs. .. | 2 | 1 | — | — | 38 | 39 | 41 |
| Total .. | 2 | 3 | — | — | 42 | 45 | 47 |

The existing arrangements whereby Health Visitors keep premature children under special observation were continued. The Domestic Help Service is a valuable asset in the care of premature infants as the provision of domestic help relieves the mother of household duties and enables her to give her whole attention to the care of the infant. The services of a consultant pædiatrician for domiciliary consultations are available by arrangement with the Regional Hospital Boards.

**Day Nurseries**

At the end of the year, there were 33 day nurseries in operation in the Administrative County, particulars of which are as follows :—

| Health Area. | Name of Nursery. | Accommodation. |
|---|---|---|
| North-East Essex | Sheepen Road, Colchester .. .. | 50 |
| | Brook Street, Colchester .. .. | 50 |
| Mid-Essex .. | Waterloo Lane, Chelmsford .. .. | 40 |
| | Chipping Hill, Witham .. .. | 25 |
| | Abbey Lane, Congregational Sunday School, Saffron Walden (Part-time) .. | 24 |
| South Essex .. | North Street, Hornchurch .. .. | 35 |
| | Elm Park, Hornchurch .. .. | 30 |
| | Rainham Hall, Rainham .. .. | 28 |
| | Palmers Avenue, Grays .. .. | 50 |
| | London Road, West Thurrock .. | 50 |
| | Whitehall Lane, Grays .. .. | 50 |
| | 23, Hall Lane, Upminster .. .. | 40 |
| Forest .. .. | Chingford Mount Road, Chingford .. | 52 |
| | Hatch Lane, Chingford .. .. | 50 |
| | Sewardstone Road, Waltham Abbey .. | 40 |
| | Spratt Hall Road, Wanstead .. .. | 50 |
| Romford.. .. | Western Road .. .. .. | 40 |
| | Collier Row .. .. .. | 40 |
| | Rush Green Road .. .. .. | 50 |
| Barking .. | Eastbury House, Ripple Road .. | 80 |
| | Goresbrook Road, Dagenham .. | 50 |
| | Rugby Road, Dagenham .. .. | 38 |
| Dagenham .. | Dagenham Avenue .. .. .. | 70 |
| | Ashton Gardens, Chadwell Heath .. | 54 |
| | Parsloes Avenue .. .. .. | 40 |
| Ilford .. .. | Dr. Barnardo's Homes, Barkingside .. | 45 |
| | Green Lane, Seven Kings .. .. | 50 |
| | Becontree Avenue, Dagenham .. | 40 |
| | Ley Street, Ilford .. .. .. | 50 |
| Leyton .. .. | Leyton Green Road .. .. .. | 60 |
| | Ellingham Road .. .. .. | 60 |
| Walthamstow .. | Billet Road .. .. .. | 50 |
| | Highams Park .. .. .. | 50 |

The arrangements for the training of students at the Ilford Day Nurseries were continued, and of the six students who entered for the examination during the year five were successful in obtaining the Certificate of the National Nursery Examination Board.

During 1949 consideration was given to the provision of two additional Day Nurseries in the Romford Health Area and an extension to the Nursery at Western Road to accommodate a further twenty children. The latter suggestion, however, was not approved by the Ministry of Health and endeavours are being made to acquire the premises at Western Road which are at present under requisition.

The average daily attendance at the nurseries referred to above was 1,150 and on an estimated population of the under-fives in the County of 137,000 it will be seen that approximately one in every 120 children under five in the Administrative County attends a day nursery. At practically each nursery there is a waiting list, and in the more densely populated areas it is of considerable length.

In order to provide as far as possible all necessary precautionary measures against accidents to babies accommodated at day nurseries, arrangements have been made for the slats in cots in use at the nurseries to be spaced so as to comply with the safety standard suggested by the Ministry of Health.

Inspectors from the Ministry of Health have visited various day nurseries throughout the year and, as far as possible, any suggestions they have made for the improvement of the nurseries have been carried out.

### Nurseries and Child Minders Regulation Act, 1948.

Under this Act, which came into force on 30th July, 1948, the County Council is responsible for the supervision of premises in their area (other than premises wholly or mainly used as private dwellings) where children are received, and of persons who for reward receive into their homes children under the age of five years, to be looked after for the day or a substantial part thereof or for any longer period not exceeding six days. At the end of the year the number of premises and daily minders registered were as follows :—

| | Registered at 31st December, 1949. | No. of children provided for. |
|---|---|---|
| Premises .. .. .. | 3 .. | 44 |
| Daily Minders .. .. | 20 .. | 77 |

A Daily Guardian Scheme is in operation in the Dagenham and Forest Health Areas.

### Health Visiting

Already there are signs of an increase in the scope of the Health Visitor's field of influence which was envisaged in the National Health Service Act, 1946, though the shortage of staff has not yet allowed for the fullest development which can be anticipated along these lines. At the end of the year there were 146 Health Visitors in the County Council's Service of whom 132 were engaged partly in Health Visiting duties including tuberculosis visiting and partly in the School Health Service undertaking School Nursing duties. Such combined appointments are the ideal arrangement because they ensure continuity of advice and teaching of parents of the child from before its birth to school-leaving age and beyond.

As regards group teaching, there has been an increase in the requests for teaching mothercraft in the schools, and in some instances the Health Visitors have been asked

to give more time to this important work than the exigencies of the Service can allow at present, considering the numbers of the existing staff and the calls upon the Health Visitor's time. In one instance, a Health Visitor is carrying out the health teaching part of the syllabus of the National Nursery Examination Board in a course held in one of the Council's Technical Colleges. Health Visitors are also lecturing to Parent/Teacher Associations and other organisations. Where such a meeting has taken the form of the popular Brains Trust, the inclusion of the Health Visitor has proved a most valuable method of driving home health teaching points to the parents.

During the year a Health Visitors' Training Course was established at the South-East Essex Technical College, Dagenham, by arrangement with the Education Committee. Miss I. M. Lovedee, a Health Visitor Tutor, was appointed to take charge of the Course. One very valuable aspect of the practical side of the Course has been the inclusion of a 'rural block' whereby each student has been allotted to the care of one Health Visitor in a rural area for a specified period to introduce the student to the varied day-to-day work of a Health Visitor.

The Health Visitor is now being asked to assist in ascertaining the needs of aged persons as well as advising in the social conditions of homes to which patients from hospital are being discharged. A matter worthy of note is the direct contact which is growing up between the health visitors in the vicinity of Chelmsford and the almoner and ward sisters at St. John's Hospital, Chelmsford. This is particularly helpful in the care of patients, especially infants, who are about to be discharged from the hospital. By arrangement, the almoner and the ward sisters of the hospital ask health visitors to make enquiries in regard to social conditions, feeding difficulties and the need for domestic help in individual cases, and the health visitor reports back to the almoner or ward sister. A most happy and informal relationship has thus been established which might with advantage be extended to other hospitals and Areas. The following are examples of cases which are being dealt with in this way :—

(i) Maternity cases discharged where there have been feeding difficulties.

(ii) Sick babies ready for discharge who may be returning to doubtful homes.

(iii) Children of various ages where the mother needs instruction and following up, to ensure that she fully understands the directions given to her at the hospital.

(iv) Patients discharged to their own homes who may be in need of some appliances or comforts.

(v) Elderly patients who may have inadequate domestic help but in whose cases the health visitor can often arrange for relatives or friends to appreciate the necessity for some extra assistance ; if this is not available, the method of obtaining assistance through the Domestic Help Service is explained.

In one or two cases of sick infants discharged to unsatisfactory homes, the health visitors have kept the hospital staff fully informed of developments and, as a result with the consent of the general practitioner concerned, the infants have been re-admitted for a further period of hospital treatment.

A similar liaison is now being built up between the almoners of the United Cambridge Hospital Group and the Health Visitors in the North-West corner of the County which comes within the area of the East Anglian Regional Hospital Board. It is hoped that this happy relationship may be further developed and extended.

It is also to be noted that the family doctor is becoming increasingly aware of the services of the Health Visitor and is making use of the information of social conditions which she is able to supply. It is hoped that this liaison will rapidly develop and be the means of enabling the Health Visitor to maintain a close interest in the health of all members of the family in close collaboration with the family doctor.

The co-operation of the Health Visitors with other officers such as County District Medical Officers of Health, Sanitary Inspectors, Inspectors of the National Society for the Prevention of Cruelty to Children, Ministry of Food Office Staffs, etc., continues to flourish. The co-operation with Chest Physicians and Care Committees is also rapidly expanding.

The number of visits paid during the year is shown in the following table. It does not, however, include visits made to school children which are recorded in my report to the Education Committee :—

| | First Visit. | Total Visits. |
|---|---|---|
| Expectant Mothers .. .. .. | 4,424 .. | 6,756 |
| Children under one year .. .. | 25,522 .. | 86,577 |
| Children between one and five years .. | 2,266 .. | 112,427 |
| Other Cases* .. .. .. | 8,027 .. | 20,295 |

*This includes visits in connection with—

Tuberculosis Cases
Tuberculosis Contacts
Care of the Aged
Follow-up of Hospital Cases
Domestic Help enquiries
Adoption Case enquiries } In co-operation with Children's
Child Life Protection enquiries } Officer.

### Convalescent Facilities

The facilities available for providing convalescence for children under five years of age have been continued.

### Co-operation with Children's Officer

During the year close co-operation has been maintained with the Children's Officer and all medical reports upon boarded-out infants have been carefully perused. Where necessary, action has been taken to obtain suitable treatment or to ensure that the child is kept under observation by the Council's medical and nursing staffs.

## THE COUNTY DENTAL SERVICE

Dental caries is without doubt the most prevalent disease of modern civilisation and its effects on general health should be more fully realised particularly by that section of the public which up to the present has shown very little interest in the question.

In consequence in any campaign designed to raise the standard of health of the nation the need to aim for dental fitness must receive a considerable amount of attention.

The approach to the problem in the treatment of school children as the citizens of the future has been on sound lines, recently strengthened by the Education Act, 1944, but prior to this certain authorities, of which this County Council was one, with foresight inaugurated a scheme under powers of the Maternity and Child Welfare Act, 1918, for the treatment of mothers and pre-school children in the belief that to assist the parent physically would also in turn stimulate her to accept similar benefit for her children. The proof of the soundness of that policy is to be found in the National Health Service Act, 1946, which now makes it a duty of every local health authority to provide dental treatment for such priority patients. It is regrettable that having provided the machinery we are now unable to provide the tools in the shape of staff, and these priority patients, who although in theory have two chances of treatment, are in reality little better off.

During the year under consideration 2,980 expectant and nursing mothers were inspected, of whom 2,866 equal to 96 per cent. were found to require treatment. It is not proposed to analyse the figures of expectant and nursing mothers separately, but it is of note that a greater number of mothers seeks treatment during pregnancy than during the nursing period, although the need for treatment is quite as high for patients in each category.

It is gratifying to be able to report that up to 97 per cent. of the number found to require treatment receive treatment which would point to the popularity of the facilities available. It demonstrates also that the scheme must be working up to the maximum of the available facilities and would very considerably be increased if the staff were available and appropriate measures taken to encourage the apathetic patients.

In regard to the type of treatment carried out a total of 2,847 fillings completed in the year is to be regarded with pleasure as indicating the desire of patients to preserve their natural teeth. This deduction is supported by the fact that there is evidence of previous care of the mouth which made fitness possible by recommendations being made for the insertion of 354 partial dentures and only 392 full dentures. It will be noted that the number of dentures actually supplied was 507.

In considering pre-school children we note that 2,455 were inspected, of whom 2,374 or 96 per cent. were recommended for treatment and 99 per cent. actually received treatment.

One cannot speak too highly of the value of this treatment in clearing up sepsis and preserving a functional dentition for these children until the permanent series of teeth erupt. This was made possible by the 1,996 fillings inserted and 1,25[illegible] applications of silver nitrate to teeth which in many instances would require to be extracted prematurely thereby laying the foundations for crowding in the permanent series at a later date. It should also be remembered that crowding of permanent teeth is largely responsible for the caries of these teeth and this early attention tends to reduce the work of the dental officer when the child comes under his care in school life. It should be stressed that the overall value of this early association between the child of tender years and the dentist is something which by the simple nature of the operative work determines the future reaction of the child to dental treatment.

# SECTION IV—MIDWIFERY AND HOME NURSING

THE extension of the County Council's responsibility in the field of domiciliary midwifery and home nursing which resulted from the National Health Service Act, 1946, led to expansion of the services during 1949 and a more complete training scheme of home nursing in the County was formulated.

Generally speaking the urban areas of the Administrative County are staffed by full-time midwives and full-time home nurses, while in rural areas the duties of home nurse and midwife are combined. Thus different problems exist in different areas. The general effect of the National Health Service Act has been to decrease the work of the domiciliary midwife and to increase the work of the home nurse. In those areas adjacent to London, which have separate nursing staffs for the two services, the midwives tend to be under-employed and the home nurses overworked; in the more rural areas this problem does not arise, although the decrease in midwifery for the home nurse midwife may affect adversely the recruitment to the service. The Area Medical Officer for the North-East Essex Health Area states: "I am satisfied that the increased demand for home nursing will more than absorb any free time which our nurses may have as a result of decreasing midwifery work; we could fully and usefully employ more home nurse midwives than we now have".

## Midwifery

The effects of the division of responsibility for hospital obstetrics and domiciliary midwifery between the Regional Hospital Boards and the Local Health Authority respectively became more apparent during 1949 and brought their own problems.

Until September, 1949, the booking of maternity patients for hospitals was made by the County Council on behalf of the Regional Hospital Board in those hospitals, formerly Essex County Council hospitals, for which the County Council had done this work prior to July, 1948. From 1st October, 1949, it became the responsibility of the Hospital Management Committees. In all Areas the investigation of the circumstances of patients requiring admission to hospital on social grounds was carried out by Health Visitors and in some Areas the assessment of priorities for admission was made by the Area Medical Officer. In one hospital in a rural area there was an attempt to insist that all ante-natal care for hospital booked patients being undertaken by the hospital. On representation to the hospital authorities that this involved some hardship on patients who had considerable distances to travel, it was agreed that where the patient requested, intermediate ante-natal care could be given at County Council clinics convenient to the patient's home. It was found, however, that very few patients were referred. In another hospital which was without facilities for an ante-natal clinic the County Council received a request from the hospital authorities that the Consultant Obstetrician should visit certain of the County Council's clinics. In September, 1949, the arrangement was made that the Obstetrician would attend four ante-natal sessions each month at convenient points in the area, so that patients booked by the hospital might be seen early in pregnancy and again at the 36th week or more frequently if

required. The ante-natal care of these expectant mothers in the intervening period was carried out by Assistant County Medical Officers or General Practitioners. Good liaison with the hospital was thereby obtained.

The fall in the birth rate, plus an increase in maternity bed accommodation at hospitals in Chelmsford, Colchester, Epping and Orsett and at some London hospitals serving south-western areas of Essex made it possible for most women who wanted to be confined in hospital to secure admission. Dagenham and Ilford were the only Areas which found during 1949 that a medical or social reason was still necessary to obtain a hospital bed. In Barking and Ilford where the maternity hospital was formerly the Borough Maternity Hospital, the hospital ante-natal services and the County Council ante-natal services were intermingled.

There is some evidence that the National Health Service Act with its provision for free maternity medical services has decreased attendance at County Council ante-natal clinics, the service provided under the Act entitling the patient to two ante-natal examinations by a General Medical Practitioner. This decrease has not, however, occurred in the south-western areas of the County.

The undermentioned Table gives the numbers of ante-natal clinics and post-natal clinics provided by the County Council as at 31st December, 1949, and also details of the attendances during the year under review :—

| *Per month* (1) | *No. of clinics provided at end of year (whether held at Child Welfare Centres or other premises)* (2) | *No. of sessions now held* **per month** *at clinics included in col. (2)* (3) | *No. of women in attendance* | | *Total No. of attendances made by women included in col. (4) during the year* (6) |
|---|---|---|---|---|---|
| | | | *No. of women who attended during the year* (4) | *No. of new cases included in col. (4) i.e. for A.N. clinics women who had* **not** *previously attended any clinic during current pregnancy and for P.N. clinics women who had* **not** *previously attended any P.N. clinic after last confinement* (5) | |
| Ante-natal clinics .. | 71 | 457 | 18,895 | 14,104 | 88,325 |
| Post-natal clinics .. | 17 | 31 | 3,922 | 3,362 | 5,347 |

The danger that midwives might be relegated to the position of maternity nurses to which attention was drawn in the Report of the Working Party on Midwives was the subject of Circular L.H.A.L. 5/49 from the Ministry of Health. In the appendix to this circular it was stated that in the past about three quarters of the domiciliary confinements were conducted by midwives who were booked early in pregnancy, and that ante-natal care was primarily the responsibility of midwives who, in most cases, worked in close association with an ante-natal clinic. It was emphasised that the provision of maternity medical services by the General Medical Practitioner was to ensure that the doctor who was called in by the midwife would have examined the patient during

pregnancy. It was not intended that the General Practitioner should be required to undertake more than two ante-natal examinations nor to attend the labour unless such attendance was considered necessary by him or by the midwife, although he might, of course, provide additional services if he so desired. The statement continued that by the Rules of the Central Midwives Board the midwife must undertake regular ante-natal supervision even if this duplicated the examination of the General Practitioner, unless the doctor made it quite clear that he accepted full personal responsibility for the case during pregnancy, labour and the lying-in period. It was the hope of the Minister that in domiciliary midwifery the midwife would continue to be regarded as the normal attendant supported by the ante-natal clinic during pregnancy and working in co-operation with the General Practitioner who had examined the patient during pregnancy and who would come to her aid if trouble arose during labour or the lying-in period. The midwife was to consider herself to be acting as a practising midwife unless she had been informed to the contrary by the doctor. The appendix to the Ministry circular further stated that the success of the arrangement would depend on the close co-operation and understanding between the General Practitioner Obstetrician and the midwife.

A change in the status of midwives does not appear to be widespread in the County. In North-East Essex, however, the Area Medical Officer reports " certain trends are now operating which will almost certainly alter the shape of the service. In an increasing number of cases the doctor attends the confinement and the midwife serves as a maternity nurse only ".

The figures for the Administrative County show that the 278 midwives employed by the County Council during 1949 attended 7,155 cases as midwives and 2,396 as maternity nurses, thus in 25 per cent. of cases a doctor was in charge of the confinement, whereas the survey " Maternity in Great Britain " showed that in 1946 in England and Wales 32 per cent. of domiciliary confinements were in charge of private medical practitioners.

Medical aid was summoned in 37.8 per cent. of the confinements attended by midwives as midwives. In 623 of the 2,708 cases in which the doctor was called by the midwife a fee was not payable to the doctor as the doctor had arranged to give maternity medical services and was, therefore, receiving a fee under Part IV of the National Health Service Act, 1946.

### Gas and Air Analgesia

At the end of 1949 of the 278 midwives employed by the County Council, 78 per cent. were qualified to administer gas and air analgesia. This compares favourably with the figure of 61 per cent. of practising midwives in the country as a whole as quoted in the report on the work of the Central Midwives Board. Analgesia was administered to 4,621 mothers as compared with 2,198 in 1948.

In October an amendment was made to the Rules of the Central Midwives Board regarding the administration of gas and air analgesia by a midwife on her own responsibility. As a result of this amendment, a certificate of good health which had been obtained from a registered medical practitioner at any time during the patient's pregnancy could be accepted by the midwife instead of the former rule that the patient

must obtain this certificate within four weeks of the expected confinement. If the patient developed any subsequent illness during pregnancy, the midwife was required to make sure from the medical practitioner that the certificate was still valid.

### Public Health (Ophthalmia Neonatorum) Regulations, 1926-1937

During the year 25 cases of Ophthalmia Neonatorum were notified; in no case was vision impaired.

### Puerperal Pyrexia Regulations, 1939

There were 153 notifications of cases of puerperal pyrexia. Of these, 119 followed hospital confinement and 34 occurred in domiciliary confinements. Nineteen of the domiciliary cases required treatment in hospital.

### Maternal Deaths

Nineteen deaths associated with child bearing occurred during the year. This gives a maternal mortality of 0.75 per thousand total births compared with a rate of 0.96 per thousand in 1948.

### Supervision of Midwives

Appointments of Non-Medical Supervisors of Midwives were made in several Areas during the year so that by the end of 1949 there were Non-Medical Supervisors in ten of the eleven Health Areas. In seven Areas the Non-Medical Supervisor is also the Superintendent of Home Nurses, and in four she is the Superintendent of the County Council's Training Home for pupil midwives established in the neighbourhood. In Barking and Walthamstow the arrangement made prior to July, 1948, was continued whereby the Matrons of the former Borough Maternity Hospitals undertook supervision of domiciliary midwives in the Area. In one Health Area the Non-Medical Supervisor of Midwives and Superintendent of Home Nurses combined the duties of Superintendent Health Visitor as the number of nursing staff did not justify the appointment of a second nursing officer for the purpose.

After the resignation of the Non-Medical Supervisor of Midwives for the North-East Essex Health Area, it proved impossible for several months to obtain a suitable applicant to fill the vacancy and the supervision of midwives was carried out temporarily by two Nursing Officers on the Central Office staff.

In November the Central Midwives Board sent a letter to all Local Health Authorities drawing their attention to the fact that the duties of the Local Supervising Authority had not been altered by the National Health Service Act, 1946, and it was still its responsibility to exercise general supervision over all midwives practising within its area. The fact that midwives in hospitals had become employees of the Regional Hospital Boards did not lessen the responsibility of the Local Supervising Authority to exercise supervision over them in accordance with the Rules of the Central Midwives Board.

In general, midwives working in hospitals welcome visits from officers of the Local Supervising Authority with the opportunity such visits give of discussing any changes in the rules governing the work of midwives.

## Training of Pupil Midwives

District training of pupil midwives was continued at the four Homes in Colchester, Dagenham, Leytonstone and Walthamstow: these Homes were approved by the Central Midwives Board while they were under the control of the Nursing Associations. The Homes at Dagenham and Leyton accept pupils for the whole of the six months period of Part II training, while in the Colchester and Walthamstow Homes the training is undertaken in association with the maternity hospital in the Area, each pupil receiving only the second half of her Part II training on the district.

The number of pupils which each Home may accept at any one time for training is—Leytonstone 14, Dagenham 8, Walthamstow 6, Colchester 3.

Early in 1949 the Central Midwives Board approved an arrangement whereby not more than three pupil midwives at any one time might receive the first three months of their Part II training in Barking Maternity Hospital. This was an extension of the training scheme from the Leytonstone Home of the County Council, the recruitment of pupils and the district training being undertaken from there.

It is recognised that the reduction of the pupil midwife's time on the district from six months to three months lessens her experience of normal midwifery and increases her contact with abnormal midwifery, but the fall in domiciliary confinements is reducing the training material on the district, thus making the change inevitable.

The Midwives Working Party Report found that excessive contact with abnormal midwifery during Part I training was considered by practising midwives to be a strong deterrent to pupil midwives in their training. One of the less obvious results of the present trend towards institutional confinement may therefore be to increase the staffing difficulties in hospitals, the district being the best recruiting ground for the midwife.

## Home Nursing

When the County Council took over in July, 1948 the nursing services formerly provided by the District Nursing Associations, it was decided that the Training Homes in Dagenham and Leyton would be administered by a Training Homes Management Sub-Committee of the Health Committee of the County Council.

The Home in Leyton, situated in the Leytonstone part of the Borough, in addition to being a Part II Midwifery Training School is a Key Training Home for the Queen's Institute of District Nursing. This is the only Home undertaking Queen's training in the County. Prior to July, 1948, the Leytonstone Home undertook home nursing in Leyton and in part of the adjoining County Borough of West Ham.

The Home at Dagenham undertook home nursing in the Borough of Dagenham, but its activities were restricted by lack of accommodation for resident staff and it had been found necessary to rent a small house in the vicinity to provide sleeping accommodation for four of the nursing staff. Extensions to this Home had been started by the Nursing Association before July, 1948, mainly to provide a district room. The approval of the Ministry of Health was obtained during 1949 to enlarge the extensions

to provide 12 additional bedrooms, larger dining and kitchen accommodation, general district and midwifery duty rooms and increased clinic accommodation. The work of these extensions was begun in September, 1949.

After July, 1948, the scope of the home nursing services undertaken from the Key Training Home in Leytonstone was extended to cover Barking and Ilford, in addition to the areas already served, namely, Leyton and part of West Ham.

It was proposed to establish branch homes in Barking and Ilford and before the end of 1949 a branch home was opened in Longbridge Road, Barking. This provided accommodation for 10 nursing staff, including two pupil midwives and two Queen's candidates. To facilitate co-ordination of the home nursing services in Barking and with a view to extension of training at a future date, a former Queen's Home (non-training) accommodating three to four nurses was put under the supervision of the Superintendent of the Key Training Home in Leyton.

In spite of repeated efforts, it had not been found possible by the end of 1949 to obtain premises for a branch home in Ilford. As a temporary measure a branch office was opened in January, 1949, in the Seven Kings district of Ilford where one of the Assistant Superintendents from Leytonstone visits daily to meet the non-resident nurses working in Ilford.

At the request of West Ham County Borough Council, an extension of the home nursing services provided by the County Council was carefully considered, but owing to shortages of staff in the County generally it was found to be impracticable.

The training of male Queen's nurses was continued in 1949 and during the year a sufficient number had been trained to supply one each in Barking, Dagenham, Ilford, Leyton and Walthamstow, and two in North-East Essex. The appointment of male home nurses is a new venture in Essex, but they have proved very popular both with patients and with staff. They deal specially with male patients and children.

An average of 10–12 Queen's nurses is trained every six months from the Training Home in Leytonstone, but only a proportion remains on the County Council's staff. The increase in the area served by the Training Home made it necessary to build up the staff at the Home itself in the first place so that during 1949 only three Queen's nurses (apart from male nurses) were available for areas not served by the Training Home.

All Health Areas report an increase in the work of the home nurse, and in particular that evening visits have increased owing to the number of patients for whom injections of penicillin are prescribed.

Staffing in some Areas was difficult as suitable applicants for vacancies were few and the acceptance of a post depended, especially in rural areas, on a house being provided. Some district councils have been most helpful in this matter.

Proposals to establish a County Training Scheme in district nursing were formulated in October and were approved by the County Council and subsequently by the Queen's Institute of District Nursing. It was proposed that the Key Training Home at Leytonstone should become the headquarters of the scheme and the existing Part II

Midwifery Training Homes at Colchester, Dagenham and Walthamstow should be associated with it, including the branch home at Longbridge Road, Barking, and other branch homes which might subsequently be established in other Areas. The lectures and arrangements for the course of training will be undertaken at Leytonstone for all candidates where, in the first instance, the majority will continue to receive their practical training as well ; smaller groups of pupils will undertake at the other Homes their practical training on the district, including tutorials and visits of observation. The proposed training scheme is to be on a block system, lectures being concentrated in the second or third month of the six months training. It is hoped that such a scheme of training throughout the County will stimulate recruiting to the domiciliary nursing service and provide a uniformly high standard of home nursing in Essex. Details of the scheme had not been completed by the end of 1949.

## REGISTRATION AND INSPECTION OF NURSING HOMES

The responsibilities of the County Council for the registration and inspection of Nursing Homes covers the whole of the Administrative County with the exception of the Boroughs of Colchester, Ilford, Leyton and Walthamstow, to whom these functions have been delegated.

Seven new registrations were approved during 1949, while two were cancelled—one due to the death of the keeper of the Nursing Home and the second owing to ill-health. At the end of the year the number of registered Nursing Homes was 56. These were inspected regularly by officers of the Department.

The North-East Metropolitan Regional Hospital Board entered into contractual arrangements with nine of these Nursing Homes, mainly those with accommodation for chronic, aged or convalescent patients. As a result the Nursing Homes were visited at intervals by representatives of the Regional Hospital Board and opportunities arose for co-operation between officers of the Board and of the County Council.

Three registered Nursing Homes providing maternity accommodation only and formerly run by local district nursing associations became units of the Hospital Service.

## NURSES ACT, 1943—NURSING CO-OPERATIONS

In the area for which the County Council are the authority there are three Nursing Co-operations, and these are inspected annually. There is one Nursing Co-operation in respect to which the County Council's duties have been delegated to the Ilford Borough Council.

## CARE OF UNMARRIED MOTHERS AND THEIR BABIES

The care of unmarried mothers and their children has been undertaken in Essex mainly by the Chelmsford Diocesan Moral Welfare Association. This Association maintains 70 beds in six shelters throughout the Administrative County and 404 women were admitted to the shelters during the year. Another 400 were visited and given

advice and help by officers of the Association. The County Council made a grant to the Association for this work and is indebted to the Association for friendly co-operation with officers of the Department on many difficult problems.

In addition, at the Hostel for mothers and babies at Buckhurst Hill, during 1949, 18 unmarried expectant mothers were admitted, 14 of whom returned to the Hostel with their babies after confinement. Their average length of stay was 64 days. Another 18 unmarried mothers were admitted after confinement with their babies and their average length of stay was 42 days. The Hostel had accommodation for 12 mothers at any one time. Applications for this accommodation decreased during the year, and when circumstances permitted, married women were admitted with their babies for three to four weeks convalescence. Eighteen such cases were admitted during the year. The staffing of the Hostel presented some difficulty, and after the resignation of the Assistant to the Matron in September, 1949, it proved impossible to obtain a suitable successor for several months. During this period the Matron continued single-handed without having anyone to provide regular off duty relief.

# SECTION V—PREVENTIVE MEDICINE, CARE AND AFTER-CARE

THIS work deals with two main classes of patient—(1) those suffering from tuberculosis ; (2) those suffering from other kinds of illness. The distinction arises mainly from the fact that the care of the former is made a duty of the Local Health Authority, while that of the latter is permissive. Moreover, tuberculosis by its very nature requires the provision of exceptional and long-term care. The number of cases of tuberculosis notified during the year was 1,576.

## Tuberculosis

The interpretation of " prevention, care and after-care " of tuberculosis goes beyond direct help to the patient and must, if it is to be effective, include indirect help such as relieving the anxiety of the patient especially insofar as the material welfare of his household is concerned, preserving the health of the family and generally assisting and encouraging them until the time when the patient is again able to resume work. Voluntary Tuberculosis Care Associations have continued to give valuable assistance in this work. Much of the help given cannot, because of its nature, be tabulated but the following *resume* gives some idea of what is being done :—

(*a*) Domiciliary Visits. Every case of tuberculosis notified in the Administrative County is visited either by a full-time Tuberculosis Visitor or by a Health Visitor. She is responsible for urging the patient to attend a Chest Clinic if he has not already done so. She herself attends the Chest Clinic and receives the instructions of the Chest Physician regarding the care of the patient in the home. The home is visited at regular intervals and the advice given includes measures to be taken by the patient and by others in the home to prevent the spread of infection within the household. She arranges for all the members of the family to attend the Chest Clinic for examination in case any of them should already have become infected with the disease. She advises on matters relating to money payments to which the family may be entitled through the National Assistance Board and gives information about benefits which may be received from Tuberculosis Care Associations. Her visits continue at regular intervals, thus providing the family with a source of knowledge and in many cases with a valued confidante. During the year approximately 19,000 visits were paid to tuberculous patients in the County.

(*b*) Open-Air Shelters. For many years the County Council have provided a number of small garden shelters for the use, on the recommendation of a Chest Physician, of persons suffering from tuberculosis. The purpose of these shelters is both preventive and remedial. On the one hand, they assist in the segregation of the tuberculous patient from other members of the family resident in the same house where such segregation might otherwise be impossible and, on the other hand, they provide the patient with an opportunity of sleeping in the open-air which is so beneficial for his condition.

At the beginning of the year, there were some 55 shelters available but, as all of these shelters were old and some were approaching the end of their useful life, it was decided to replace them at the rate of 10 a year. The replacements are of the latest type of revolving shelter which may be turned round according to weather conditions. The number of shelters in use at the end of the year was 56.

(*c*) Extra Nourishment. The County Council continued to provide one pint of milk a day upon the recommendation of the Chest Physician to patients receiving treatment for tuberculosis in their own homes. Since 5th July, 1948, patients receiving this grant of milk had been subject to assessment under the County Council's scale but, in July, 1949, it was decided to revert to the arrangement in being before the coming into operation of the National Health Service Act and to provide milk free of charge. The total number of persons who received a grant of milk during the year was 189. It should be mentioned that Tuberculosis Care Associations also provide milk and that the direct provision by the County Council is intended partly to supplement Care Association grants where necessary and partly to cover those districts which are not yet served by Care Associations.

(*d*) Provision of Domestic Helps. Tuberculosis patients being nursed at home are eligible to receive domestic help in order that assistance may be given with the extra work involved in the household. As can be well understood, the provision of such help is dependent on the willingness of the help to enter a tuberculous household and, although with the precautions which are taken by the County Council the risk of infection is slight, nevertheless, the dread of contracting the disease is, in some instances, great. The supply of such helps, therefore, although adequate in most Areas, is variable and much useful work is being done by those who have agreed to serve. It is undoubtedly a service to the community which is well worth while and no doubt plays a part in relieving pressure on hospital beds.

(*e*) Tuberculosis Care Associations. Voluntary Tuberculosis Care Associations continued their excellent work during 1949 and the formation of the Brentwood and District Care Association towards the end of the year brought the number of such Associations to 12. At one time it seemed likely that, owing to the widespread impression that the inauguration of the National Health Service had largely ended the need for such voluntary bodies, there might be a considerable fall in the income which they derived from voluntary sources. Fortunately, however, although there was some falling off, it was not serious and, generally speaking, the Associations have been successful in raising considerable sums of money with which to augment the grant of 30/- per thousand of the population which has continued to be made by the County Council to each Association. Some of the activities formerly within the province of Care Associations have been absorbed into the services made available by statutory provision, e.g., the loan of sick-room equipment which will be provided by the County Council in co-operation with the British Red Cross Society and the St. John Ambulance Brigade; provision of clothing for necessitous persons being nursed at home is now the responsibility of the National Assistance Board,

and for patients in hospital the responsibility of the Hospital Service; the endeavour to secure employment for the tuberculosis patient able to undertake work is the responsibility of the Ministry of Labour, while the provision of convalescent facilities is now the responsibility of the County Council or of the Hospital Service. There remains, nevertheless, more than enough work for Tuberculosis Care Associations to do in supplying those individual and, therefore, variable needs which it is so difficult to cover through statutory sources, such as the provision of extra nourishment of various kinds, the provision of material comforts, e.g. extra coal, not otherwise available; the direct payment of small debts which may have been incurred; the payment of fares for relatives visiting patients in hospital and, in some cases, provision of materials so that patients can undertake the making of articles in their own homes.

Appreciation is most certainly due to members of Care Committees, all of whom give their services voluntarily. They include representatives of local bodies, Area Medical Officers, Health Visitors and other members of the Council's staff, and Chest Physicians. They give much of their time and often money to this very valuable work.

At the end of the year about one-eighth of the population of the County was not served by a Care Association, although the contemplated formation of two further Associations early in 1950 will reduce the area not served to a population of about 90,000. There is hope that this will also be covered before long.

(*f*) Rehabilitation. For many years the County Council has assisted with maintenance of Essex patients undergoing rehabilitation at Papworth Village Settlement, Cambridge, and the British Legion Settlement at Preston Hall, Maidstone, and these arrangements have been continued since 5th July, 1948. In both village settlements workshops of various kinds are set up in which patients are instructed in such trades as printing, carpentry, motor mechanics and brush-making. By arrangement with the settlements, payment is made by the County Council towards the maintenance of patients only when they are able to work five or six hours daily. The period of rehabilitation may be long and the cost of maintenance, which is approximately £5 a week, would therefore be appreciable if large numbers took advantage of the facility. In some cases the Ministry of Labour allows grants during the period of rehabilitation, which reduces the charge to the County Council by approximately 35/- a week. There is no doubt that, ideally, the schemes are good. One of the main factors militating against their wider application is that of economy.

During the year maintenance grants were paid in respect of 15 patients in these Settlements.

(*g*) Boarding-out of Child Contacts of Tuberculosis. Provision was made in the County Council's Proposals, under Section 28 of the National Health Service Act, for the boarding-out with foster-parents of children who are in close contact with persons infected with tuberculosis. Upon the passing of the Children Act, 1948, however, there was some doubt as to whether or not this arrangement would necessarily come within the scope of the National Health

Service Act. Eventually it was decided that child contacts, temporarily separated from their parents in order to avoid the risk of infection, are the responsibility of the Health Committee, and towards the end of the year it was agreed to make an allowance of £1. 3s. 6d. a week plus £2 a quarter for clothing to any approved foster-mother who undertakes the care of child contacts whom it is desirable to board out. There must, of course, be full co-operation by the parents when such removals are advised and they would only take place in cases where there was no other possible means of avoiding contact between the patient and the child.

(*h*) B.C.G. Vaccination. Towards the end of the year, the County Council submitted to the Minister of Health Supplementary Proposals under Section 28 of the National Health Service Act for the carrying out of B.C.G. vaccination. This vaccination consists in injecting tubercle bacilli of very low virulence in order to produce a slight infection with tuberculosis. Such an infection is without danger to the patient and gives an added resistance in the event of later contact with the disease. The intention at the present is to vaccinate only those children who are members of a tubercular household. The arrangements formulated in accordance with the Proposals were not made until early in 1950 and will be reported in that year.

(*i*) Other Provision. Much, of course, remains to be done, such as the development of a complete scheme of Diversional Therapy, that is, teaching arts and crafts and supplying the patient with the necessary material in order to make the long time of compulsory rest less monotonous, and the provision of workshops in which the patient can do a few hours of useful paid work daily, according to his strength. Such schemes are naturally expensive, but their valuable psychological help is, without doubt, great.

## Other Illnesses

The prevention of illness is, of course, the sole reason for the existence of a Health Department and is undertaken in many ways, e.g. by advice at Clinics of various kinds, by immunisation and vaccination programmes and by carrying out a general programme of health education, all of which are discussed separately. On the other hand, attention to the care and after-care of those who are ill is given mainly by the provision of the following services :—

(*a*) Visits by Home Nurses. In all cases of illness, and on the recommendation of a General Medical Practitioner, the services of a Home Nurse are available. She is responsible for carrying out any special nursing care or treatment ordered by the doctor and during acute illness may visit the patient twice daily or, exceptionally, even more frequently.

(*b*) The Service of a Domestic Help. Call can be made on the Domestic Help Service whenever there is illness in a household. The domestic help may attend, if necessary, for the maximum period of 8 hours daily but the amount of time allotted varies with the circumstances, for example, if the mother of a young family is ill and the husband is in full employment, the maximum daily period is often required, whereas if the father or one of the children is ill,

the amount of help needed may be considerably less. The allowance of help in cases of illness is generous and has been valuable in tiding the family over a very difficult period.

(*c*) Loan of Sick-room Equipment. The nursing of the sick requires equipment which is not normally available in the average home. For many years this need has been realised and has been met in various ways. Two voluntary agencies, the British Red Cross Society and the St. John Ambulance Brigade, have, scattered throughout the County, depots or stores containing items of such equipment available on loan for a small weekly charge. In addition, various Home Nurses in the County have at their homes small stores of equipment which are available for a similar purpose, while a larger store is available at Beachcroft Nurses' Training Home in Leytonstone and at York House, Dagenham. The total number of such stores in the County is 156, made up as follows :—

| | |
|---|---|
| Home Nurses' Houses .. .. .. | 88 |
| Nurses' Training Homes .. .. .. | 2 |
| British Red Cross Society Depots .. .. | 46 |
| St. John Ambulance Brigade Depots .. .. | 20 |

The County Council's Proposals under the National Health Service Act, 1946, provided for a comprehensive scheme for the loaning of sick-room equipment and preparations were made during the year in order to implement those Proposals. In anticipation of such a scheme, several large items of equipment were purchased by the County Council for loan to special cases.

(*d*) Sending Patients to Holiday Homes for Convalescence. On the recommendation of a doctor, a patient who has recovered from an illness and who no longer requires medical or nursing care can be sent to a holiday home in order to recuperate. During the year 198 patients have been sent to suitable holiday homes. The average length of stay has been two weeks. The cost of maintenance at the homes, most of which are supported by voluntary funds, varies from £1 10s. 0d. to £4 4s. 0d. a week, the average weekly charge being approximately £2 13s. 0d. The patient is responsible for the full cost of maintenance in the home but, in necessitous cases, an abatement is made after an assessment of means. Several of the homes have regulations regarding admission, the most restrictive of which was found to be that those over 65 years of age are not admitted. For most of the applications in this age group, however, accommodation was eventually found.

(*e*) The Thurrock Mobile Meals Service. This experimental service for delivering cooked meals to patients in their own homes which was described in the Annual Report for 1948, continued to operate throughout the year. In March the County Council approved the payment of a grant of £500 in respect of meals provided for tuberculous patients during the year ended 30th September, 1949. The number of meals distributed during the year averaged approximately 850 a month, the largest group of recipients being old people living alone who through illness or infirmity were unable to get meals for themselves.

The Nuffield Provincial Hospitals Trust had originally decided to sponsor the scheme until 31st December, 1949, but they agreed to continue their financial support until 31st July, 1950, so that the County Council would be able to decide whether sufficient data had been collected to justify consideration being given to the taking over of the scheme under the provisions of Section 28 of the National Health Service Act.

## INFECTIOUS DISEASES

A summary of the notifications of infectious diseases in the various County districts during 1949 is set out in Table VI, on page 101. The Table shows that after corrections for wrong diagnosis 24,909 patients were notified as suffering from infectious diseases, compared with 26,253 in 1948. This is accounted for largely by a decrease in the number of notifications of *Whooping Cough* which, with 6,507 cases, was exceptionally prevalent in 1948. The number of cases in 1949 was 3,864 which was rather less than in 1947 and more than in 1946. The number of deaths was 9, of which 6 were of infants under the age of one year.

*Scarlet Fever* was more prevalent than usual in the last quarter of the year and the number of cases during the year was 2,368 compared with 1,817 in 1948. As a result, 1949 was the worst year for scarlet fever since 1944. The worst month was December with an average of about 110 cases a week. One patient died of the disease during 1949.

The number of corrected notifications of *Diphtheria* was only 7, compared with 61 in the previous year. There was one death. A comparison with earlier years will be found in the section on diphtheria immunisation on page 78.

The number of cases of *Measles* notified in 1949 was nearly the same as in the previous year, over 90 per cent. of the cases occurring in the first half of the year. The number of cases each week rose from 508 in the week ended 8th January to 1,209 in the last week of February, remaining over 1,000 for four successive weeks. Thereafter the number of cases decreased steadily. The last occasion that a weekly total of over 1,000 cases was reached was in 1941 when, in the spring of that year, it happened ten times. Most parts of the Administrative County had a fairly high incidence. Generally speaking, in the few places which remained relatively free from the disease there had been an exceptional prevalence in 1948.

The incidence of *Acute Anterior Poliomyelitis* and of *Acute Polioencephalitis* was much above that for 1948. A separate note on the outbreak follows on page 67.

There were 79 notifications of *Dysentery* during the year, compared with 73 in 1947 and 193 in 1948. The latter figure includes 117 cases associated with the outbreak in the North Street School, Hornchurch, referred to in the Report for 1948. Apart from this incident, there were 76 cases, so it appears that the prevalence of this disease has been fairly steady over the past three years.

No other infectious disease has shown any noteworthy increase or decrease since 1948.

There were 357 cases of *Food Poisoning* notified during the year, of which at least 88 (Ilford 50 cases, Leyton 19 cases and Barking 19 cases) were attributed to the consumption of cockles at Southend-on-Sea.

## ACUTE POLIOMYELITIS, 1949

During the year 316 confirmed cases of acute anterior poliomyelitis and 29 of acute polioencephalitis were notified in Essex. In the following paragraphs the two conditions will be considered together under the general title of poliomyelitis. The overall incidence of the disease was 0.22 per thousand of the population, more than 50 per cent. higher than in 1947. The average incidence in England and Wales was, however, less than in 1947 ; the number of cases notified during 1949 being rather less than three-quarters of the number notified during 1947. As is usual with this disease, practically all the cases occurred in the second half of the year.

### Course of the Epidemic

In the country as a whole, the epidemic rise was much slower than in 1947 and the peak was not reached till the middle of October, about 6 weeks later than the 1947 peak. After this the number of cases each week decreased rapidly so that, in the last week of the year, only 66 cases were notified, about the same number as in 1947. The epidemic in Essex pursued a very similar course, but with the higher incidence referred to above.

During July and August cases occurred in each of the six Boroughs coterminous with Health Areas. Otherwise, the only parts of the County where an appreciable number of cases was notified were in the Epping and Saffron Walden Rural Districts, most of the cases in the latter district being in the Stansted area. In addition, sporadic cases were reported from most parts of the County. Cases continued to occur in Epping Rural District during October and, in Saffron Walden Rural District, at least one case was notified each week till mid-November. In 1947 there was only one case in Epping Rural District. The ten cases in Saffron Walden Rural District in 1947 occurred in 9 separate villages and in only two of these did further cases occur in 1949.

In September it appeared that the epidemic had reached its peak, but in October local outbreaks occurred in Chelmsford Borough and in the Brentwood, Witham and Chigwell Urban Districts and, to a lesser extent, in Billericay Urban District. In none of these districts were there more than six cases notified during 1947.

Generally speaking, incidence was lowest in the north-east of the County and near the coast, and highest in the places mentioned.

### Age Distribution

The ages of the 345 confirmed cases are shown in the following Table :—

| | *0–* | *1–* | *3–* | *5–* | *10–* | *15–* | *25–* | *Total* |
|---|---|---|---|---|---|---|---|---|
| Males .. .. | 6 | 18 | 37 | 45 | 27 | 33 | 27 | 193 |
| Females .. .. | 5 | 23 | 22 | 31 | 21 | 22 | 28 | 152 |
| Total .. | 11 | 41 | 59 | 76 | 48 | 55 | 55 | 345 |

Fifty six per cent. of the cases were male and 44 per cent. female, the male predominance being less than in 1947, when over 61 per cent. of the patients were males.

The following Table compares the cases notified in the two years in various age groups :—

| Age Group | 1947 | | 1949 | |
|---|---|---|---|---|
| | Cases | Per cent. | Cases | Per cent. |
| 0– | 7 | 21.7 | 11 | 32.2 |
| 1– | 19 | | 41 | |
| 3– | 22 | | 59 | |
| 5– | 51 | 41.2 | 76 | 35.9 |
| 10– | 40 | | 48 | |
| 15– | 41 | 37.1 | 55 | 31.9 |
| 25– | 41 | | 55 | |
| Total .. | 221 | 100.0 | 345 | 100.0 |

The number of cases was greater in 1949 than in 1947 in each age group but the proportionate increase from 1947 to 1949 was considerably greater among children under 5 than for either children between 5 and 15 or adults. As a result, whereas in 1947 21.7 per cent. of all cases were under 5 years of age, in 1949 the figure was 32.2 per cent.

When Rural Districts are compared with Urban Districts (including Boroughs) it is found that the incidence in the pre-school age group was just significantly greater in the Rural Districts than in the Urban Districts. There was little difference at school ages but for adults the incidence in the Rural Districts was more than twice that in the Urban Districts.

## Mortality

The death of 32 residents of Essex was attributed to the disease, a death rate of 0.021 per thousand, compared with 0.017 in 1947. The case mortality rate (9.2 per cent.) was, however, lower in 1949 than in 1947, when it was 11.3 per cent. As in the earlier year, the case mortality was considerably higher for adults than for children though the difference was not so marked as in 1947. The case mortality of adults decreased and that of children increased, but neither difference was statistically significant.

## Residual Paralysis

Medical Officers of Health of County Districts kindly supplied information of the number of cases paralysed at any time and the number paralysed on 17th December, 1949. It appears that 78 per cent. of the confirmed cases were paralysed at some time ; 169 of these were still paralysed on 17th December, 1949. Some of them must at that time have been in the acute stage and it is estimated that about 150 (43 per cent. of the confirmed cases) suffered from some degree of residual paralysis.

## Questionnaire Enquiry

In an attempt to unravel the causes of this disease, Dr. Allan McFarlan of the Department of Medicine at Cambridge prepared a questionnaire giving details of the patient and his environment. Supplies of these were distributed to Borough and District Medical Officers of Health, who returned them when completed to the Department for transmission to Dr. McFarlan. As a result, 242 completed questionnaires, including a few relating to cases notified in January, 1950, had been sent to Dr. McFarlan by early in 1950. Certain additional information was thus obtained about the 1949 cases, namely the parts of the body paralysed, the occupation of the patient and of the chief wage-earner of the household, the number of rooms in the dwelling, the number of persons living there and the date of the onset. The date of onset was also known for some other cases from notifications received by Area Medical Officers, details of which were telephoned to my office. Using, instead of the date of notification, the date of onset where available and the date of notification or admission to hospital in other cases, the epidemic picture remained substantially the same except that it was moved forward about one week. The number of cases for which the other information was available was rather less than two-thirds of the total number of confirmed cases. These cases, unfortunately, represent in certain respects a biased sample. The sample is overweighted with cases from the Metropolitan Police District and from Rural Districts but seriously deficient in cases from towns in the country part of Essex. Nevertheless, the sample has been tested and found to be reasonably satisfactory in respect of age and seasonal distribution and it seems worth while using the information obtained, while bearing in mind its possible bias.

## Sites of Paralysis

In 233 cases it was possible to determine the parts of the body affected by paralysis. The sites were classified as bulbar and cervical and lumbar, each subdivided into left and right. The following Table shows the sites involved by age and sex :—

| *Site of Paralysis* | *Total* | *Sex* | | *Age Groups* | | |
|---|---|---|---|---|---|---|
| | | *Males* | *Females* | *0–4* | *5–14* | *15 and over* |
| No paralysis .. .. | 47 | 29 | 18 | 8 | 27 | 12 |
| Bulbar only .. .. | 16 | 9 | 7 | 5 | 3 | 8 |
| Cervical only .. .. | 31 | 17 | 14 | 14 | 8 | 9 |
| Lumbar only .. .. | 74 | 39 | 35 | 32 | 23 | 19 |
| Bulbar and Cervical .. | 9 | 5 | 4 | 2 | 1 | 6 |
| Bulbar and Lumbar .. | 2 | 2 | — | — | — | 2 |
| Cervical and Lumbar .. | 29 | 18 | 11 | 7 | 10 | 12 |
| Bulbar, Cervical and Lumbar | 15 | 10 | 5 | 2 | 10 | 3 |
| Totals .. .. | 223 | 129 | 94 | 70 | 82 | 71 |

Twenty-one per cent. of all cases had no paralysis; this figure agrees well with the figure of 78 per cent. quoted above as the percentage of cases originally paralysed. The percentage not paralysed was slightly higher for males than for females and was as high as 33 per cent. among school children. The lower part of the body was more often affected by paralysis than were other parts; lumbar paralysis was reported alone or in combination with paralysis of other parts in 120 cases compared with 84 and 42 cases respectively of cervical and bulbar paralysis. The infrequency of lumbar and bulbar paralysis together but without cervical paralysis is worthy of note.

There were no effective differences between the sexes in respect of site, but when age is considered there was some suggestion of an increase of bulbar involvement with increasing age. The left side was more frequently affected than the right, but not so as to make the difference significant.

## Occupation

In 231 cases the occupation of either the patient or the chief wage-earner of the household was given. Lack of up-to-date knowledge of the number of men employed on various jobs in Essex makes the effect of occupation or social-economic position on the incidence of the disease difficult to determine. What was done was to classify the occupation according to the wide grouping used by the Social Survey in the Monthly Survey of Sickness and to compare the number found in each group with the number which would be expected if the proportion of each group in the population of Essex was the same as in the whole country, as shown by the results of the Social Survey's samples. This comparison shows a significantly higher proportion of poliomyelitis cases among the families of agricultural workers and a significantly lower proportion among the professional and managerial group. The first result arises, no doubt, from the fact that there were so many cases, well represented in the sample, in predominantly agricultural districts such as Saffron Walden Rural District. There seems to be no reason why the proportion of the professional and managerial group should be less in Essex than in the country as a whole, so the incidence in this group may, in fact, be lower than average. Possibly the omission from the sample of cases from some of the towns outside the Metropolitan Police District may have something to do with this result. In any case it should be accepted with reserve.

One occupation associated with an unexpectedly high number of cases is that of bus conductors. No bus conductor is known to have had the disease but, on ten questionnaires, " bus conductor " was given as the occupation of the chief wage-earner of the household. The number of conductors concerned is, however, only 8, since in two cases two children of the house were affected. Six of these 8 conductors are employed on Green-line or trolley buses or are described as bus conductors of the London Transport Executive. Another one, described simply as a bus conductor, lives at Leyton and can almost certainly be taken to be an employee of the London Transport Executive. The eighth lives at Witham, and the patient was a woman of 39. The other patients were all children under the age of 9, three being non-paralytic and six paralytic.

The Chief Medical Officer of the London Transport Executive has kindly provided figures for the number of their conductors stationed at garages in Essex, and this number may reasonably be taken as the number who live in Essex, as most conductors live near their garage. It appears from this that there are about 2,075 bus conductors of the London Transport Executive in Essex, living for the most part in the south-west of the County in an area whose boundaries are such as just to include Epping, Brentwood and Tilbury. The male population between the ages of 15 and 65 on 31st December, 1947, in this area was estimated as 337,670. This may reasonably be regarded as representing the male working population, workers over 65 being offset by those unemployed. Since the end of 1947 there has been roughly a four per cent. increase in the population. The increase among working males is not likely to be more than this and the total working population in 1949 may reasonably be taken as 350,000. In the area in question 234 cases of poliomyelitis were notified. In respect of only 170 of these does the information at our disposal reveal the occupation of a male (either the patient or the chief wage-earner) of the household. In a smaller group of 125 the occupation given is that of the chief wage-earner of the household and the patient was under 16 years of age and had not started work.

In view of the proportion of bus conductors in the working population of the area, a sample of 170 might be expected to contain just one bus conductor (and a sample of 125 on the average less than one). But in such a sample we have 7 households with a bus conductor as the chief wage-earner, i.e. including the conductor at Leyton and excluding the one at Witham. The probability of obtaining 7 by chance alone is very small and indeed we should only expect such a sample to contain 5 or more less than four times out of 1,000. Thus, even if the conductor at Leyton was not an employee of the London Transport Executive, and one of the non-paralytic cases was wrongly diagnosed as poliomyelitis, the number of bus conductors is still significantly high. It is also interesting to note that in five cases a member of the household of a bus driver caught the disease, two being women and three children. In four of these, the driver was stated to be employed by the London Transport Executive, while the fifth, living at Nazeing, was simply stated to be a bus driver. The number of bus drivers may be taken as equal to the number of bus conductors, so that there is some slight suggestion of a higher incidence among the dependants of bus drivers as well as of bus conductors.

The most likely explanation of the high incidence among children of bus conductors should seem to be that the fathers, being in contact with large numbers of people including children, become carriers and pass the disease on to their children, a similar method of spread to that postulated in other cases, e.g. in the Mauritius epidemic.

## Housing

In 225 cases the number of persons living in each house where a case of poliomyelitis occurred was given, and in 216 of these the number of rooms in the house was also given. The number of families of different sizes in houses with different numbers of rooms are given in the following Table :—

| *Persons living in House* | *Number of Rooms* | | | | | | | | *Total* |
|---|---|---|---|---|---|---|---|---|---|
| | *1* | *2* | *3* | *4* | *5* | *6* | *7* | *over 7* | |
| 2 | — | — | 1 | 1 | — | 1 | — | — | 3 |
| 3 | 1 | 1 | 13 | 7 | 16 | 2 | — | 1 | 41 |
| 4 | — | — | 10 | 21 | 28 | 6 | 2 | 2 | 69 |
| 5 | — | — | 4 | 6 | 25 | 8 | 2 | — | 45 |
| 6 | — | — | 1 | 5 | 6 | 6 | 2 | — | 20 |
| 7 | — | — | 2 | 4 | 6 | 1 | 1 | 1 | 15 |
| 8 | — | — | — | 4 | 5 | 3 | — | 1 | 13 |
| 9 | — | — | — | 1 | 4 | — | — | — | 5 |
| 10 | — | — | — | — | 3 | 1 | — | — | 4 |
| 11 | — | — | — | — | 1 | — | — | — | 1 |
| Totals .. | 1 | 1 | 31 | 49 | 94 | 28 | 7 | 5 | 216 |

Thirteen families (6 per cent.) were housed at a density of two or more persons per room. The similar figure for the population of Essex at the census of 1931 was 4.6 per cent., but the difference is only one of three families and has no statistical significance.

In view of the lack of up-to-date figures of housing densities the 1931 census figures have also had to be used to consider whether the distribution of the number of rooms available to families of a given size in which a case of poliomyelitis occurred indicates that such families were more or less overcrowded than the average. For each family size, the number of families which might be expected to live in houses of each size was calculated in such a way that the total number of families of each size was the number observed. The figures were totalled for houses of each size and the results are shown below :—

| *Number of Families* | *Number of Rooms* | | | | | | |
|---|---|---|---|---|---|---|---|
| | *1 or 2* | *3* | *4* | *5* | *6 or 7* | *8 or over* | *Total* |
| Actual .. | 2 | 31 | 49 | 94 | 35 | 5 | 216 |
| Expected .. | 7 | 26 | 55 | 66 | 49 | 13 | 216 |

The poliomyelitis families show a greater concentration on houses with five rooms than the 1931 census population, mainly at the expense of the larger houses but also to some extent of the smaller units. This is just the kind of result that would be expected, since most of the building since 1931 has been of medium-sized houses wi

five or less rooms. There seems, therefore, to be no evidence that the poliomyelitis cases in 1949 were living in either more or less crowded conditions than the average for the County.

## TUBERCULOSIS

### Notifications

The following is a summary of the formal notifications of new cases of tuberculosis received in the Department during the year. The number of primary cases was 1,576 compared with 1,650 in 1948 :—

**Primary Notifications of New Cases of Tuberculosis.**

| Age Period | 0– | 1– | 2– | 5– | 10– | 15– | 20– | 25– | 35– | 45– | 55– | 65– | 75– | All Ages |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Respiratory, Males .. | 1 | 3 | 17 | 22 | 18 | 92 | 109 | 178 | 127 | 101 | 77 | 27 | 6 | 778 |
| Females .. | 1 | 3 | 16 | 25 | 17 | 110 | 107 | 167 | 75 | 30 | 14 | 9 | 2 | 576 |
| Non-Respiratory, Males .. | 1 | 6 | 12 | 19 | 13 | 7 | 12 | 13 | 12 | 6 | 5 | 3 | 1 | 110 |
| Females | — | 2 | 13 | 26 | 17 | 10 | 11 | 17 | 8 | 3 | 2 | 2 | 1 | 112 |

In addition 442 new cases came to the notice of Medical Officers of Health during the year otherwise than by formal notification, an increase of 19 such cases over the figure for 1948. The sources of this information are given below :—

| Source of Information. | Number of Cases. Respiratory. | Non-Respiratory. |
|---|---|---|
| Death Returns from Local Registrars .. | 9 | 1 |
| Returns of transferable deaths from Registrar-General .. .. .. .. | 2 | 3 |
| Posthumous Notifications .. .. .. | 4 | 2 |
| "Transfers" from other areas (other than transferable deaths) .. .. .. | 345 | 33 |
| Other sources (Forms I and II) .. .. | 30 | 13 |
| | 390 | 52 |

When compared with the corresponding figures for 1948, it is found that the number of cases under the heading "Other Sources" has considerably decreased. On the other hand, the number of "Transfers from other Areas" increased from 289 to 378 following the trend noted in the last Annual Report. The age distribution of the 1949 transfers and of all other cases which came to the notice of Medical Officers of Health are given in the following Tables :—

**Transfers from other areas.**

| Age Period | 0– | 1– | 2– | 5– | 10– | 15– | 20– | 25– | 35– | 45– | 55– | 65– | 75– | All Ages |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Respiratory, Males .. | — | — | 3 | 13 | 3 | 11 | 41 | 56 | 28 | 17 | 9 | 4 | — | 185 |
| Females .. | — | — | 2 | 12 | 7 | 16 | 31 | 51 | 29 | 7 | 3 | 2 | — | 160 |
| Non-Respiratory, Males .. | — | — | — | 2 | 5 | 1 | 2 | 1 | 2 | 1 | 1 | — | — | 15 |
| Females | — | — | 3 | 4 | 2 | 1 | — | 2 | 4 | 2 | — | — | — | 18 |

All other Sources.

| Age Period | 0– | 1– | 2– | 5– | 10– | 15– | 20– | 25– | 35– | 45– | 55– | 65– | 75– | All Ages |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Respiratory, Males .. | — | — | — | — | 1 | 2 | 3 | 6 | 3 | 3 | 5 | 4 | 2 | 29 |
| Females .. | — | 1 | — | — | — | — | 4 | 4 | 3 | — | 2 | 1 | 1 | 16 |
| Non-Respiratory, Males .. | — | — | 3 | — | 1 | 1 | 1 | 2 | — | 2 | — | — | — | 10 |
| Females | — | 1 | 4 | 1 | 1 | 1 | — | — | — | 1 | — | — | — | 9 |

Forty-three males and 47 females more than in 1948 moved into the County, the age pattern remaining much the same. As in 1948, a large proportion of the transfers came from the County of London due to movement mostly into London County Council Housing Estates in Chigwell, Chingford, Romford, Dagenham and Ilford. The number of cases transferred into Chigwell Urban District was more than three times the number of primary cases. In the Borough of Chingford there were 25 per cent. more transfers than primary cases, and in the Borough of Romford transfers amounted to more than one half of the primary cases. The incidence of inward transfers has increased in both Chigwell and Romford.

## Attack and Death Rates

The following Table shows the number of primary notifications of tuberculosis and the number of deaths attributed to the disease together with the annual attack and death rates in quinquennia since 1920 and for individual years since 1945 :—

| Years | Respiratory Tuberculosis | | | | Non-Respiratory Tuberculosis | | | | Tuberculosis (All forms) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Notifications | | Deaths | | Notifications | | Deaths | | Notifications | | Deaths | |
| | No. | Rate* | No. | Rate* | No. | Rate* | No. | Rate* | No. | Rate* | No. | Rate* |
| 1920–24 | 4904 | 1.07 | 3212 | 0.70 | 1322 | 0.29 | 789 | 0.17 | 6226 | 1.36 | 4001 | 0.87 |
| 1925–29 | 5626 | 1.09 | 3376 | 0.65 | 1853 | 0.36 | 704 | 0.14 | 7479 | 1.45 | 4080 | 0.79 |
| 1930–34 | 6005 | 0.97 | 3498 | 0.57 | 2122 | 0.34 | 705 | 0.11 | 8127 | 1.32 | 4203 | 0.68 |
| 1935–39 | 5521 | 0.81 | 3015 | 0.44 | 1783 | 0.26 | 577 | 0.08 | 7304 | 1.07 | 3592 | 0.53 |
| 1940–44 | 6507 | 1.02 | 3081 | 0.48 | 1859 | 0.29 | 592 | 0.09 | 8366 | 1.31 | 3673 | 0.58 |
| 1945–49 | 6952 | 0.95 | 2674 | 0.37 | 1381 | 0.19 | 404 | 0.06 | 8333 | 1.14 | 3078 | 0.42 |
| 1945 | 1273 | 0.99 | 548 | 0.43 | 337 | 0.26 | 112 | 0.09 | 1610 | 1.25 | 660 | 0.51 |
| 1946 | 1454 | 1.01 | 511 | 0.36 | 297 | 0.21 | 78 | 0.05 | 1751 | 1.22 | 589 | 0.41 |
| 1947 | 1453 | 0.97 | 554 | 0.37 | 293 | 0.20 | 80 | 0.05 | 1746 | 1.17 | 634 | 0.43 |
| 1948 | 1418 | 0.93 | 539 | 0.35 | 232 | 0.15 | 76 | 0.05 | 1650 | 1.08 | 615 | 0.40 |
| 1949 | 1354 | 0.87 | 522 | 0.34 | 222 | 0.14 | 58 | 0.04 | 1576 | 1.01 | 580 | 0.37 |

*Annual rate per 1,000 population.

Both attack and death rates declined further since 1948. The death rates are the lowest ever recorded in the County. Notifications, however, are still at a higher level than before the recent war. The number of primary notifications was less than in 1948 for each sex and for both respiratory and non-respiratory forms.

The following Table gives the number of deaths and the death rate from tuberculosis for the years 1946 to 1949 for each Health Area :—

| *Health Area* | *Number of deaths* | | | | *Death Rate per 1,000 population* | | | |
|---|---|---|---|---|---|---|---|---|
| | *1946* | *1947* | *1948* | *1949* | *1946* | *1947* | *1948* | *1949* |
| 1. North-East Essex | 39 | 50 | 57 | 65 | 0.24 | 0.30 | 0.33 | 0.37 |
| 2. Mid-Essex .. | 59 | 61 | 55 | 63 | 0.31 | 0.31 | 0.27 | 0.31 |
| 3. South-East Essex | 40 | 41 | 50 | 46 | 0.43 | 0.42 | 0.50 | 0.46 |
| 4. South Essex .. | 87 | 87 | 91 | 75 | 0.46 | 0.44 | 0.44 | 0.36 |
| 5. Forest .. | 65 | 66 | 68 | 62 | 0.41 | 0.40 | 0.39 | 0.34 |
| 6. Romford .. | 37 | 32 | 30 | 31 | 0.56 | 0.46 | 0.41 | 0.42 |
| 7. Barking .. | 37 | 56 | 30 | 41 | 0.50 | 0.72 | 0.38 | 0.52 |
| 8. Dagenham .. | 54 | 63 | 49 | 55 | 0.51 | 0.57 | 0.44 | 0.48 |
| 9. Ilford .. .. | 66 | 75 | 69 | 53 | 0.38 | 0.42 | 0.38 | 0.29 |
| 10. Leyton .. | 47 | 45 | 52 | 37 | 0.46 | 0.43 | 0.49 | 0.35 |
| 11. Walthamstow .. | 58 | 58 | 64 | 52 | 0.49 | 0.47 | 0.52 | 0.42 |
| Administrative County | 589 | 634 | 615 | 580 | 0.41 | 0.43 | 0.40 | 0.37 |

Since the preparation of the last Annual Report estimates of the populations of each County district in age groups have been published by the Registrar-General. Using these estimates it is possible to calculate standardisation factors to convert crude death rates from tuberculosis in Areas to rates which are comparable with each other and with the County rate. This was done and it was found that all the standardisation factors were remarkably close to unity, indicating that the differences in the age structure of the various Areas have little effect on the death rate from tuberculosis.

The following table gives the number of deaths from tuberculosis in each Area during the past four years, the death rate and the ratio of the adjusted death rate in each Area to the County rate.

| *Health Area* | *Deaths 1946–49* | *Death Rate 1946–49* | *Ratio of adjusted Rate to County Rate* |
|---|---|---|---|
| 1. North-East Essex .. .. | 211 | 0.31 | 0.78 |
| 2. Mid-Essex .. .. .. | 238 | 0.30 | 0.74 |
| 3. South-East Essex .. .. | 177 | 0.45 | 1.13 |
| 4. South Essex .. .. .. | 340 | 0.42 | 1.06 |
| 5. Forest .. .. .. | 261 | 0.38 | 0.96 |
| 6. Romford .. .. .. | 130 | 0.46 | 1.16 |
| 7. Barking .. .. .. | 164 | 0.53 | 1.32 |
| 8. Dagenham .. .. .. | 221 | 0.50 | 1.28 |
| 9. Ilford .. .. .. .. | 263 | 0.36 | 0.89 |
| 10. Leyton .. .. .. | 181 | 0.43 | 1.05 |
| 11. Walthamstow .. .. .. | 232 | 0.48 | 1.17 |
| Administrative County .. | 2,418 | 0.40 | 1.00 |

Testing the divergences of the death rate in the several Areas it is found that North-East Essex and Mid-Essex have rates significantly lower and Barking and Dagenham rates significantly higher than the County rate. The Walthamstow rate is high but it is of doubtful significance. Differences of the other rates from the County rate can quite reasonably be ascribed to chance fluctuations.

## VACCINATION

The following Table shows the number of vaccinations and re-vaccinations carried out during 1949 :—

| *Age at 31st December, 1949* | *Under 1* | *1–4* | *5–14* | *15 or over* | *Total* |
|---|---|---|---|---|---|
| Number vaccinated .. .. | 3,394 | 2,192 | 424 | 641 | 6,651 |
| Number re-vaccinated .. .. | 32 | 53 | 164 | 1,352 | 1,601 |

Owing to a different method of keeping the statistics before 5th July, 1948, comparison of the total figures with those of previous years is not possible. In the past the number of successful primary vaccinations of children under the age of 1 was given and in the following Table these figures are compared with the number of children vaccinated who, at the end of the year, were under 15 years of age for the second half of 1948 and for 1949 :—

| | | | | | |
|---|---|---|---|---|---|
| 1938 | .. | .. | 7,787 | 1945 | .. .. 10,494 |
| 1939 | .. | .. | 7,044 | 1946 | .. .. 17,396 |
| 1940 | .. | .. | 5,956 | 1947 | .. .. 18,840 |
| 1941 | .. | .. | 5,838 | 1948 | to June 30th 7,078 |
| 1942 | .. | .. | 10,008 | | from July 5th 2,448 |
| 1943 | .. | .. | 11,779 | 1949 | .. .. 6,010 |
| 1944 | .. | .. | 12,145 | | |

It appears that the total for 1949 is very much less than in any year previous to since 1941, and appreciably less than before the war when fewer babies (who provide ost of the subjects for vaccination) were born.

The following Table shows the number of vaccinations and re-vaccinations carried it in the Health Areas, and it also shows the percentage of children under 5 who were accinated during the year and the number of persons per thousand of the population ho were re-vaccinated :—

| *Health Area* | *Number Vaccinated* | *Number Re-vaccinated* | *Percentage under 5 Vaccinated* | *Re-vaccinations per 1,000 population* |
|---|---|---|---|---|
| . North-East Essex .. | 746 | 223 | 4.6 | 1.3 |
| . Mid-Essex .. | 1,174 | 186 | 6.5 | 0.9 |
| . South-East Essex .. | 283 | 101 | 2.8 | 1.0 |
| . South Essex .. | 1,247 | 266 | 5.3 | 1.3 |
| . Forest .. .. | 1,108 | 245 | 4.9 | 1.4 |
| . Romford .. .. | 342 | 84 | 3.7 | 1.1 |
| Barking .. .. | 170 | 38 | 1.8 | 0.5 |
| . Dagenham .. | 116 | 26 | 0.8 | 0.2 |
| Ilford .. .. | 831 | 264 | 4.8 | 1.4 |
| . Leyton .. .. | 265 | 68 | 2.6 | 0.6 |
| . Walthamstow .. | 369 | 100 | 3.2 | 0.8 |
| ministrative County .. | 6,651 | 1,601 | 4.1 | 1.0 |

About 4 per cent. of children under 5 in Essex were vaccinated during the year, e percentage in the Health Areas varying from over 6 per cent. in Mid-Essex to under per cent. in Dagenham. The Areas may conveniently be grouped into three, as lows :—

| | |
|---|---|
| Those with over 4 per cent. vaccinated | North-East, Mid- and South Essex, Forest and Ilford |
| Those with between 2 and 4 per cent. vaccinated | South-East Essex, Romford, Leyton and Walthamstow |
| Those with less than 2 per cent. vaccinated | Barking and Dagenham |

Similar figures for the second half of 1948 have also been examined when very much the same order was obtained, in particular the Areas could be separated into the same three groups. The reason for these large differences is not clear.

As to the adequacy of the position there are certainly no grounds for complacency. If this state of affairs were to continue it would mean that, even in the best Area, less than a third of children reaching their fifth birthday would have been vaccinated and in the worst Area less than 1 in 20, the average being 1 in 5.

The number of re-vaccinations was less than one-quarter of the number of primary vaccinations, and of these more than three-quarters were of adults. The above Table shows that this is equivalent to 1 in 1,000 of the population being vaccinated. As in the case of primary vaccination, there are considerable differences between the Areas and, apart from the lower position of Mid-Essex, the order is very similar.

There can be little doubt that the decrease in the number of vaccinations coincides with the cessation of compulsory vaccination combined with a general complacency regarding the possibilities of smallpox infection. So long as cases of smallpox are quickly diagnosed there may be some justification for this attitude. The danger lies in the undiagnosed case mixing in an unvaccinated community. The outbreak as a result of the case on s.s. "Mooltan" in March, 1949 should serve as a warning. The total number of confirmed cases was 11, of whom 5 died. Four of the fatal cases were unvaccinated and one, aged 61, had not been vaccinated since infancy.

Propaganda regarding infant vaccination continued throughout the Administrative County, since the reaction to vaccination in adult life is likely to be much less severe if vaccination has already taken place in infancy.

## DIPHTHERIA IMMUNISATION

In 1949 22,533 children under 15 years of age completed a primary course of immunisation against diphtheria. Of these, 19,345 were under the age of 5 and 3,188 between 5 and 15. In addition, 10,719 children were given booster doses. These figures correspond with the number of record cards received during the year in respect of completed immunisations. It is known, however, that these figures somewhat understate the number of immunisations actually performed, as some General Practitioners omitted to return record cards until the fee payable by local health authorities for completed records had been agreed. It was ascertained by subsequent enquiry that this deficiency was not large. The following Table shows the number of primary immunisations carried out in each of the Health Areas during the last three years :—

| | | 1947 | 1948 | 1949 |
|---|---|---|---|---|
| 1. | North-East Essex .. .. | 2,084 | 3,110 | 2,160 |
| 2. | Mid-Essex .. .. | 2,087 | 2,180 | 2,752 |
| 3. | South-East Essex .. .. | 1,376 | 1,869 | 1,414 |
| 4. | South Essex .. .. | 2,493 | 3,980 | 3,305 |
| 5. | Forest .. .. .. | 2,506 | 2,649 | 2,608 |
| 6. | Romford .. .. | 1,153 | 1,700 | 1,378 |
| 7. | Barking .. .. .. | 1,215 | 1,609 | 1,537 |
| 8. | Dagenham .. .. | 2,485 | 2,251 | 2,293 |
| 9. | Ilford .. .. .. | 2,185 | 2,566 | 1,609 |
| 10. | Leyton .. .. .. | 1,545 | 1,986 | 1,525 |
| 11. | Walthamstow .. | 2,654 | 2,711 | 1,952 |
| | Administrative County .. | 21,783 | 26,611 | 22,533 |

It will be seen that in most of the Areas fewer immunisations were carried out in 1949 than in 1948. In this connection it should be borne in mind that a large proportion of primary immunisations are performed at about the first birthday and consequently the number of primary immunisations will fluctuate with the number of births. As the number of births reached a peak in 1947, it was to be expected that the number of primary immunisations would also reach a peak in 1948.

The following Table shows the number of children who had completed a full course of primary immunisation at some time before 31st December, 1949, and their age at that time, according to the records held at the Area Health Offices :—

| *Health Area* | *Age at 31st December, 1949* | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | *Under 1* | *1* | *2* | *3* | *4* | *5–9* | *10–14* | *Totals* |
| North-East Essex | 73 | 1,530 | 2,021 | 2,004 | 1,704 | 9,652 | 8,906 | 25,890 |
| Mid-Essex .. | 118 | 1,938 | 2,052 | 1,549 | 1,334 | 10,213 | 9,093 | 26,297 |
| South-East Essex | 71 | 1,097 | 2,243 | 1,153 | 749 | 3,538 | 3,063 | 11,914 |
| South Essex .. | 178 | 2,048 | 2,715 | 2,364 | 1,803 | 10,221 | 9,079 | 28,408 |
| Forest .. | 162 | 2,204 | 2,000 | 1,923 | 1,901 | 8,685 | 6,336 | 23,211 |
| Romford .. | 14 | 661 | 1,086 | 902 | 915 | 4,681 | 4,210 | 12,469 |
| Barking .. | 72 | 840 | 1,246 | 1,087 | 857 | 4,622 | 4,797 | 13,521 |
| Dagenham .. | 80 | 1,258 | 1,518 | 1,383 | 1,208 | 6,411 | 7,385 | 19,243 |
| Ilford .. .. | 154 | 1,925 | 3,594 | 2,530 | 1,281 | 10,792 | 7,832 | 28,108 |
| Leyton .. | 55 | 700 | 2,097 | 1,458 | 1,103 | 5,095 | 4,457 | 14,965 |
| Walthamstow .. | 246 | 1,531 | 1,873 | 1,604 | 1,371 | 7,007 | 7,189 | 20,821 |
| Administrative County | 1,223 | 15,732 | 22,445 | 17,957 | 14,226 | 80,917 | 72,347 | 224,847 |

The Registrar-General has provided estimates of the child population of each County District as at 30th June, 1949, and from them the percentage of children in each Area who have been immunised was calculated, and is set out in the following Table :—

| | Health Area. | Under 5 years. | 5 and under 15 years. |
|---|---|---|---|
| 1. | North-East Essex .. .. | 50.5 | 81.8 |
| 2. | Mid-Essex .. .. .. | 40.1 | 70.9 |
| 3. | South-East Essex .. .. | 61.3 | 50.1 |
| 4. | South Essex .. .. | 46.4 | 64.5 |
| 5. | Forest .. .. .. | 47.8 | 57.3 |
| 6. | Romford .. .. .. | 49.8 | 84.7 |
| 7. | Barking .. .. .. | 57.2 | 83.1 |
| 8. | Dagenham .. .. .. | 51.2 | 72.5 |
| 9. | Ilford .. .. .. | 53.9 | 85.1 |
| 10. | Leyton .. .. | 58.8 | 80.9 |
| 11. | Walthamstow .. .. | 62.6 | 96.2 |
| | Administrative County .. | 52.2 | 73.5 |

It will be noted that for the Administrative County as a whole 52.2 per cent. of children under 5 and 73.5 per cent. of children between 5 and 15 have been immunised. These figures compare with 51.1 per cent. and 73.0 per cent. one year previously and 48 per cent. and 70 per cent. in 1945. The lower figure in each case for the "under 5" group, is of course, due to the fact that very few infants are immunised until late in their first year. An estimate was made of the number of children between 1 and 5 years, and from this the percentage who were immunised in this group was found to be 65.2 per cent.

There are seen to be considerable differences in the level of immunisations in the several Areas. Some of these differences may depend to some extent on the removal of immunisation records relating to children who have left the Area and the addition of those relating to children who settle in the Area, and such information is not always known.

The decline in the number of cases of and deaths from diphtheria presumed to be due partly at least to immunisation can be seen from the following Table giving figures for the last five years with those for 1938 (before intensive immunisation commenced) for comparison.

| | Corrected Notifications. | Deaths. |
|---|---|---|
| 1938 .. .. | 1,220 (uncorrected) | 67 |
| 1945 .. .. | 219 | 14 |
| 1946 .. .. | 152 | 16 |
| 1947 .. .. | 76 | 6 |
| 1948 .. .. | 61 | 5 |
| 1949 .. .. | 7 | 1 |

Although the immunisation campaign is reasonably satisfactory, propaganda was intensified throughout the County during the year.

## WHOOPING COUGH IMMUNISATION

During 1949 immunisation against whooping cough was carried out in the following Boroughs—Barking, Chelmsford, Dagenham, Harwich, Leyton and Walthamstow.

In Leyton and Walthamstow immunisation was carried out in connection with the Medical Research Council's trials, and the numbers who completed a course during the year are as follows :—

| | Under 1 year. | 1–4 years. | 5–14 years. | Total. |
|---|---|---|---|---|
| Leyton .. .. | 360 | 522 | — | 882 |
| Walthamstow .. | 453 | 285 | — | 738 |

In Barking, Chelmsford, Dagenham and Harwich immunisation has been in progress since before 5th July, 1948 ; the scheme in Barking commenced as long ago as 1937. The numbers immunised in all the Boroughs during the year are as follows :—

| Under 1 year. | | 1–4 years. | | 5–14 years. |
|---|---|---|---|---|
| 464 | .. | 1,751 | .. | 110 |

It is recognised that the small number being immunised cannot have any appreciable effect on the incidence of whooping cough. Moreover, whooping cough is most dangerous to life during the first six months, and the number being immunised in the under 1 year group is very small. The conflicting reports on the efficacy of the vaccines being used in Whooping Cough Immunisation make it a wise procedure to wait until the results of the Medical Research Council's trials are made known before advocating immunisation on a wide scale.

## ESSEX EPIDEMIOLOGICAL COMMITTEE

Four meetings of the Committee were held during the year.

A luncheon was given in honour of Dr. W. A. Bullough, C.B.E., on his retirement as County Medical Officer, when he was commended and thanked for his long and valuable service as Chairman ever since the inception of the Committee.

Several new members were appointed in order to replace others who had retired during the year. The same relative number of members for each branch of the profession was, however, maintained.

The loss of Professor M. Greenwood, who died in October, was felt keenly by all the members and many tributes were paid to him both as a personality and as a valued contributor to the discussions.

The range of subjects submitted to the Committee for consideration was a wide one and included an outbreak of Sonne Dysentery in a school, poliomyelitis, the results of Schick Tests carried out in school entrants, smallpox on s.s "Mooltan," whooping cough immunisation, the risk of infection from articles emanating from a leper colony, food poisoning following the consumption of cockles and an outbreak of food poisoning in a hospital.

Some of the more interesting points which emerged were as follows :—

(1) Outbreak of Sonne Dysentery

(*a*) Stewed apples stored overnight in unsatisfactory conditions were the probable cause of infection,

(*b*) Causative organism was Shigella Sonne which was isolated from the fæces of those affected.

(*c*) Shigella Sonne dies rapidly in stewed apple stored at 37 C. At 20 C, however, it is capable of survival and multiplication for at least seven days, in spite of the acidity of the medium.

(2) Outbreak of Food Poisoning in a Hospital

The outbreak was probably due to the contamination of dried egg powder by a coagulate positive Staphylococcus Aureus present in the cook's cut finger.

(3) Outbreak of Food Poisoning resulting from eating Cockles

(*a*) Cockles heavily brined caused no trouble.

(*b*) There is a need for the bacteriological study of the cockle from the time it is landed.

(4) Schick Tests carried out on School Entrants

Out of 171 children resident in one area in Essex and with no history of previous immunisation, the surprisingly high proportion of 58 per cent. was Schick negative. Further investigations in other parts of the County have commenced.

## VENEREAL DISEASE

Returns received from Special Clinics reveal that during the year 213 new cases of syphilis and 370 new cases of gonorrhoea were diagnosed in Essex patients. In addition 2,044 other conditions, diagnosed as non-venereal, were discovered. In the following Table the cases are analysed according to the place in which the diagnosis was made in the categories Essex, London, other Home Counties and other places :—

| Place of diagnosis. | Syphilis. | Gonorrhoea | Other Conditions. |
|---|---|---|---|
| Essex .. .. .. | 88 | 182 | 758 |
| London .. .. .. | 99 | 133 | 801 |
| Other Home Counties .. | 24 | 48 | 462 |
| Elsewhere .. .. | 2 | 7 | 23 |

Arrangements were made during the year for the display of posters on railway stations throughout the County giving particulars of the nearest clinics for the treatment of venereal diseases.

Satisfactory arrangements are in operation for the follow-up of persons under treatment for venereal disease and of persons known or believed to be a source of venereal infection. In some areas of the County a Social Worker or Almoner employed by the Regional Hospital Board is responsible, and in other areas the duty devolves on a senior member of the professional staff of my Department.

## CANCER ACT, 1939

The major part of the Cancer Act, 1939, was repealed by the National Health Service Act, 1946. One of the unrepealed sections of the Act imposed on the County Council a duty to institute proceedings in connection with the prohibition of advertis

ments offering to treat any person for Cancer or offering any article for the alleged treatment of Cancer. In April, 1949, the Council decided to delegate this duty to the Health Committee. It was not necessary to take action in respect of this provision at any time during the year.

## HEALTH EDUCATION

It is unfortunate that so little encouragement was given by the National Health Service Act to those who had made prevention of disease their life's work and who had gained so much experience in that particular field. The present tendency is to make the same person responsible for both prevention and cure, but it is doubtful if the very different attitude of mind necessary for each is often to be found in the same person. Education in the prevention of disease is a long and tedious process requiring from the teacher discipline and patience gained only after long experience and showing results slowly and almost imperceptibly. Those engaged in it, however, accustomed as they are to dealing with the normal, quickly learn to detect the earliest manifestation of disease. It possesses neither the urgency nor the drama of curative medicine and for this very reason may be thought by those who require the stimulus of the more tangible results of the treatment of disease to be dull and monotonous and therefore tends to be neglected by them. Nevertheless, it has an attraction for those interested in it which is no less absorbing and a usefulness which is no less satisfying.

The education of the public in healthy living is considered to be one of the most important functions of the Health Department. It has for many years been carried on among particular groups, such as mothers at child welfare and ante-natal clinics, school children at school and parents of young children in the home, but much still remains to be done especially among the general public where the field is almost without limit. In order to organise and develop health education schemes and to co-ordinate work already being done in the eleven Areas in the County a Health Education Organiser was appointed and began duty in February, 1949. The following is an outline of what has been achieved during the year.

### Films

One of the best means of reaching large sections of the general public for the purpose of health propaganda is by the use of talking films. A wide range of health films is available to local authorities from the Central Office of Information and during the year eleven such films were given throughout the County at Mothers' Clubs, Exhibitions and in connection with Mothercraft and Home Nursing Courses.

### Lectures

Arrangements were made for members of the medical and nursing staff to give ten lectures to Women's Institutes, Mothers' Clubs and Parent/Teachers' Associations. In addition, in response to requests from Youth Clubs, Women's Guilds and Trades Union Councils, 47 lectures were given by a former Area Representative of the Central Council for Health Education on behalf of the County Council. A course of three lectures on Health and Sex Education was given to School Leavers at the Romford County High School for Girls. Courses of lectures on Mothercraft and Home Nursing to children about to leave school have been conducted by Health Visitors.

### Health Exhibitions

The County Council again provided a health exhibition at the County Agricultural Show held at Saffron Walden. Members of the medical and nursing staff were in attendance in order to answer questions in connection with the different services depicted in the Exhibition and in which the public showed much interest. Exhibitions of a similar nature were given at Hornchurch and Grays.

### Central Council for Health Education

As in previous years the County Council made a contribution to the Central Council for Health Education. As a result the Central Council's advisory service was available to my Department as well as its extensive range of posters, pamphlets and other literature which was widely distributed. The County Council also acquired two Exhibition Stands from the Central Council. These stands are used for the display of health topics, such as Diphtheria Immunisation, Local Health Authority Services, Sleep and Food and Drink Infection.

### Royal Society for the Prevention of Accidents

The annual contribution of £2 2s. 0d. was again made to the Royal Society for the Prevention of Accidents (Home Safety Section) and full use was made of the literature in connection with Health Exhibitions and Lectures.

## DOMESTIC HELP SERVICE

Domestic Help Schemes have been operated by various welfare authorities throughout the County for some time but it is only since the coming into force of the National Health Service Act, 1946, that a complete scheme to cover the whole of the Administrative County has been introduced. Judging from the dramatic increase in the number of requests for help since that time, it would appear that even the most enthusiastic advocates of domestic help schemes were not fully aware of the need.

At the end of 1948 there were 38 whole-time and 666 part-time helps in the County and assistance had been given to 1,918 cases during the second half of the year. At the end of 1949 there were 73 whole-time and 1,169 part-time helps, and assistance had been given to 6,380 cases during the year.

One of the most revealing social conditions which has come to light is the number of feeble old people living alone and the number of chronic sick or disabled either living alone or left alone during the day while relatives in the same household go out to work. Many of those people require a certain amount of assistance on a permanent basis, so that the number of helps employed on that particular type of case is likely to increase. With such an expanding service administrative problems are bound to arise and during the year settlement has been reached on the following points :—

(1) As from January, 1949, 1/10d. an hour became the standard rate of pay for all domestic helps employed throughout the Administrative County. Previously there had been several different rates of pay varying from 1/6d. to 2/–, according to the arrangements in force before 5th July, 1948, in the areas of the welfare authorities whose services the County Council took over on that date.

(2) Approval was given to the payment of a cycle allowance of £5 a year for full-time helps and 4d. a day for part-time helps.

(3) It was decided to pay helps for the time taken in travelling between cases when more than one case was attended on the same day.

(4) Special arrangements were made in regard to the attendance of domestic helps in households where there is present a person suffering from tuberculosis or any other infectious disease. These arrangements include the medical examination of the help (including an x-ray of the chest), the issue of special protective overalls and the issue of special instructions regarding the avoidance of infection; furthermore, the help receives an extra 2d. an hour while attending such cases and has special benefits regarding sick pay.

(5) Arrangements were made for a residential help to be provided in rural areas for short-term cases, the hourly rate of pay being 1/10d. for a 48-hour week, plus 2/- a night as compensation for sleeping away from home.

(6) Four new posts for Area Domestic Help Organisers were created, so that each of the eleven Health Areas now has a full-time organiser.

Apart from the above, arrangements were made with the National Institute of Houseworkers Ltd. for the examination of 51 domestic helps from all over the County. The examination was entirely practical and it took place in private houses loaned for the purpose. The help was asked to carry out duties which she would normally be asked to carry out in the course of her work. Forty-six helps were successful in gaining the Diploma and 8 gained credits. The Diplomas were presented to the successful candidates by the Chairman of the County Council on 1st December, 1949, and it was later decided that helps holding the Diploma should be awarded an increase in pay of 1d. an hour.

Most of the helps are imbued with a true sense of social service. Cases are constantly coming to notice in which helps are rendering additional service quite outside the strict scope of their duties and for which, of course, they receive no payment.

## CHIROPODY

Before 5th July, 1948, chiropody services were administered by the Boroughs of Barking, Dagenham, Leyton and Walthamstow and the Urban District of Brentwood. In addition to those services which were conducted at 8 clinics, mainly in the metropolitan part of the County, 3 clinics in rural areas were provided by the County Council who employed one full-time chiropodist for the purpose. For some months after that date there was some uncertainty as to whether or not the chiropody service would be taken over by the Regional Hospital Boards. After full discussion of this question with the Ministry of Health, it was agreed early in June, 1949, that the County Council could, as from 5th July, 1948, be responsible for these services under the provisions of Part III of the Act (Section 28, Prevention of Illness, Care and After-care).

In conformity with the general policy of the Ministry, it is at present the Council's policy to extend chiropody services only in exceptional circumstances and then only if there are available for the purpose premises which can be utilised without incurring additional expenditure on adaptations or other works. The number of chiropody

clinics at the end of 1949 was 12; the staff employed was 17 full-time and 1 part-time chiropodists. The total number of attendances was approximately 70,000. The service is available for all classes of the community and is especially appreciated by the aged.

## THE NATIONAL ASSISTANCE ACT, 1948—PART III

### Medical Supervision of Institutional Accommodation

The County Welfare Committee is responsible to the Council for carrying out the duties imposed by Part III of the National Assistance Act, 1948, but certain functions in connection with the medical supervision of institutional accommodation for the aged are my responsibility. Institutions for the aged, with which the Welfare Committee are concerned, fall into two main categories—(*a*) hostels provided directly by the Committee, and (*b*) mixed institutions formerly known as Poor Law Institutions. The mixed institutions also provide beds for the chronic sick, who are the responsibility of the Regional Hospital Board.

A Senior Medical Officer visits the hostels at regular intervals in order to report upon them and to make recommendations in regard to any changes in the arrangements which may seem desirable from a medical point of view. Home nursing and other appropriate services are also provided by the Department for residents in those hostels in the same way as they would be provided if they were living in their own homes, for example—should a General Medical Practitioner decide that special nursing is required, a home nurse in the area would pay regular visits. Similarly residents register as the patients of General Practitioners of their own choosing in the area of the hostel.

The Welfare Committee also have the use of accommodation in a small number of hospitals in order that they may temporarily house homeless families. Medical supervision of this accommodation is undertaken by my Department.

### Classification of Accommodation

During the year, apart from visits to hostels, a considerable amount of work fell upon the Department in classifying in co-operation with the Regional Hospital Board residents occupying Part III accommodation in mixed institutions. The reason for the classification was in order to determine whether or not residents in Part III accommodation, i.e. the accommodation provided by the Local Authority, were properly placed having regard to the Ministry of Health definitions which are as follows :—

> "*Sick*—and therefore proper to the Board—patients requiring continued medical treatment; also supervision and nursing care. This would include very old people who though not suffering from any particular disease, are confined to bed on account of extreme weakness.
>
> *Infirm*—and therefore proper to the Local Authority—persons who are normally able to get up and who would attend meals either in the dining-room or in a nearby day-room. This class would include those who need a certain amount of help from the staff in dressing, toilet or removing from room to room, and those who from time to time—for example in bad weather—may need to spend a few days in bed."

In all, 909 residents were seen. It was agreed that, of these, 564 were properly placed in Part III accommodation but that the other 345 should have been in

geriatric unit, a mental hospital or in a hospital for the chronic sick; in other words, that they should be the responsibility of the Regional Hospital Board. On the other hand, apart from the 909 cases already mentioned, a number of patients thought by the medical superintendents of the institutions to be wrongly occupying chronic sick beds was also seen; approximately half of them were judged to be suitable for Part III accommodation. It, therefore, appeared that, if anomalies were rectified, the contention widely quoted that chronic sick beds were being occupied by those who should be in Part III accommodation would be largely dispelled.

## Welfare of the Blind

The after-care and follow-up of blind persons is the responsibility of the Welfare Committee who arrange for the work to be carried out by Home Teachers. There are fourteen such teachers and one Placement Officer employed. The duties of a Home Teacher include the responsibility of visiting blind persons and teaching them, wherever possible, to read embossed literature and to give instruction in simple part-time occupations. They also assist in advising in regard to available social services, and generally in regard to methods of overcoming the effects of the disability.

The facilities provided for the certification of blind and partially-sighted persons were continued by co-operation between my Department and ophthalmic specialists who see patients at their surgeries or at local hospitals; where it is necessary, the ophthalmic specialist makes a domiciliary visit. During the year 1949, the number of persons examined by specialists was 443.

On 31st March, 1950, there were 2,436 persons on the blind register (1,096 males and 1,340 females), and of these 2,380 (1,071 males and 1,309 females) were classified as employable. The main occupations undertaken by blind workers are given below :—

| | | | |
|---|---|---|---|
| Basket workers .. | 17 | Factory operatives .. | 39 |
| Boot repairers .. .. | 11 | Machine knitters .. | 18 |
| Clerks and typists .. | 16 | Mat makers .. .. | 16 |
| Dealers, Newsagents, Tea agents and Shopkeepers .. .. | 18 | Piano Tuners .. .. | 26 |
| | | Poultrykeepers .. | 18 |
| | | Telephone operators .. | 19 |

In addition to these, there were 87 blind persons employed in sighted industry. The total number of blind persons employed was 285.

# SECTION VI—THE MENTAL HEALTH SERVICE

THE arrangements for a combined Mental Health Service, as outlined in the Report for 1948, have functioned satisfactorily during the year under review, and the first full year's operation of the service has provided an opportunity for a re-orientation in the public outlook regarding those suffering from psychiatric illness or mental defectiveness. The accent on "Preventive Care" is doing much to remove the old prejudices formerly associated with mental health.

The service continued to be administered by the Health Committee through their Mental Health Sub-Committee consisting of 23 members and holding monthly meetings.

## Staff

The staff employed in carrying out the duties involved consisted of :—

One Senior Medical Officer (part-time—approximately 25 per cent.)
One Medical Officer for ascertainment (part-time—approximately 50 per cent.)
One Supervising Duly Authorised Officer and Petitioning Officer
One Assistant Supervising Duly Authorised Officer and Petitioning Officer
30 Duly Authorised Officers
2 Mental Welfare Visitors

In addition, arrangements were continued with the North-East Metropolitan Regional Hospital Board for the services of an Adviser in Mental Deficiency to be available, if required.

One of the two Mental Welfare Visitors referred to retired on medical grounds in October, 1949, and has not been replaced.

The Duly Authorised Officers and the Mental Welfare Visitors have continued to operate in accordance with the arrangements set out in last year's report.

Increased commitments in the sphere of Occupation Centres necessitated additional appointments, and the staff employed in this branch of the service is now as follows :—

One Instructor-in-charge, 6 Supervisors, 2 Assistant Instructors, 4 First Assistants, 14 Assistants, 7 Dinner Assistants (part-time), 1 Bus Guide (part-time).

Close co-operation has been maintained with the North-East Metropolitan and East Anglian Regional Hospital Boards and also the Hospital Management Committees. The Duly Authorised Officers and Mental Welfare Visitors have continued to carry out the supervision of mental defectives on licence from Institutions, and have furnished periodical reports on the progress of such cases for the information of the appropriate Management Committees. Reports have also been supplied on the home circumstances of defectives in institutions for the purpose of reconsideration of Orders of Detention by the Visitors, and also in connection with applications for holidays, leave of absence, or for discharge.

Arrangements were continued, as in the past, whereby examinations were carried out at the request of the police, and reports furnished for the information of the Justices.

The services of Voluntary Associations have not been utilised, as the staff employed is considered sufficient to carry out the existing duties.

No scheme for the training of Mental Health Workers has been initiated, but another group of Duly Authorised Officers attended Refresher Courses organised by the National Association for Mental Health during the year.

**National Health Service Act, 1946—Section 28—Care and After-Care**

The arrangements made with one of the mental hospitals for the provision of after-care for patients discharged from the hospital have continued during the year. A number of cases discharged from other mental hospitals has also been referred for after-care although no official arrangements have yet been made.

**Lunacy and Mental Treatment Acts, 1890-1930**

During 1949 patients were dealt with under the Lunacy and Mental Treatment Acts as follows :—

| | With the assistance of the Duly Authorised Officer. | Without such assistance. |
|---|---|---|
| LUNACY ACT, 1890 | | |
| Section 11 (Urgency—7-day) | 32 | — |
| Sections 14 and 15 (Certified) | 581 | — |
| Section 20 (Urgency—3-day) | 69 | — |
| MENTAL TREATMENT ACT, 1930 | | |
| Section 1 (Voluntary) | 126 | 927 |
| Section 5 (Temporary) | 61 | 25 |

**Mental Deficiency Acts, 1913-38.**

During the year 266 patients were ascertained as defectives who were subject "to be dealt with" under the principal Act as follows :—

(*a*) Patients reported by Local Education Authorities under Section 57 of the Education Act, 1944 :—

| | Males. | Females. | Total. |
|---|---|---|---|
| (i) Under Section 57 (3) | 62 | 45 | 107 |
| (ii) Under Section 57 (5)— | | | |
| On leaving special schools | 27 | 13 | 40 |
| On leaving ordinary schools | 2 | 2 | 4 |
| (*b*) Patients reported from other sources | 42 | 72 | 115 |
| Total | 133 | 133 | 266 |

These patients were disposed of during the year as follows :—

| | Males. | Females. | Total. |
|---|---|---|---|
| (*a*) Taken to "places of safety" | 8 | 1 | 9 |
| (*b*) Placed under Statutory Supervision | 125 | 131 | 256 |
| (*c*) Consideration adjourned | — | 1 | 1 |
| Total | 133 | 133 | 266 |

In addition, 16 other patients were found not " subject to be dealt with " during the year and were placed under voluntary supervision.

At the end of the year, the number of ascertained mental defectives found " subject to be dealt with " was as follows :—

| | Males. | Females. | Total. |
|---|---|---|---|
| (*a*) In Institutions .. .. .. | 690 | 576 | 1,266 |
| (*b*) Under Guardianship .. .. | 19 | 41 | 60 |
| (*c*) In " places of safety " .. .. | 13 | 18 | 31 |
| (*d*) Under Statutory Supervision .. | 1,074 | 885 | 1,959 |
| (*e*) Consideration adjourned .. .. | — | 1 | 1 |
| Totals .. .. | 1,796 | 1,521 | 3,317 |

There were also 1,301 patients living in the community over whom voluntary supervision was exercised.

Throughout 1949 the shortage of vacant accommodation in institutions continued and, if anything, became more acute. It was only possible to secure the admission of patients of the greatest urgency, and at the close of the year there was a waiting list of 222 patients needing urgent institutional care. Particulars of all such patients have been forwarded to the two Regional Hospital Boards concerned.

**Occupation Centres**

Occupation Centres for the training of defectives under community care continued to provide a very useful social service and, as an addition to the Junior Centres at Chelmsford, Dagenham and Walthamstow, three new Junior Centres were opened in 1949 at Barking, Colchester and Grays. As a result, it was possible to arrange occupation centre training for an additional 120 patients.

The Senior Centre at Dagenham, which caters for boys over the age of 14 years, was extended and now has 52 senior boys on the register.

Arrangements have been made for the conveyance of patients to all the Junior Centres, with the exception of Colchester, where the catchment area is too widespread to permit of adequate transport facilities being provided.

At the end of the year the names of 363 patients were on the registers of the seven Centres, the average daily attendance being in the region of 300.

Hot mid-day meals are supplied at all the Centres, the necessary arrangements having been made through the School Meals Service. A small charge is made for such meals but, at the discretion of the Mental Health Sub-Committee, these can be provided free in cases of hardship.

Arrangements have been made for the periodical medical examination of patients attending the Occupation Centres, and for survey visits to be paid once a quarter to the Centres. The advice of a specialist is also available for all defectives who attend the Centres.

As a result of the training and supervision afforded to patients, it was possible to arrange for six of them to be returned to the scholastic system and for the reports issued in respect of them under Section 57 of the Education Act, 1944, to be cancelled.

# APPENDIX

## TUBERCULOSIS ATTACK RATES

THE upward trend in the figures of notifications of tuberculosis in all forms experienced during the war, whilst providing a source of anxiety, was not unexpected. War conditions, with long hours of work in blacked-out and ill-ventilated surroundings, difficulties of travel to and from work, overcrowding resulting from evacuation, and the general strain resulting from over-exertion in anxious circumstances provided a potent breeding ground for tuberculosis.

With a return to more normal conditions it was to be hoped that the adverse influences on tuberculosis attack rates would disappear with reasonable rapidity and the downward trend experienced prior to the war would quickly begin to manifest itself. It appeared reasonable, therefore, and desirable, to examine the available statistics of primary notifications in the County of Essex with a view to determining the attack rates over a period prior to the war and making a comparison with the war-time and post-war figures :—

PRIMARY NOTIFICATIONS OF TUBERCULOSIS—NUMBERS AND RATES PER 1,000 POPULATION.

| *Year* | *Respiratory* | | *Non-Respiratory* | | *Year* | *Respiratory* | | *Non-Respiratory* | |
|---|---|---|---|---|---|---|---|---|---|
| | *No.* | *Rate* | *No.* | *Rate* | | *No.* | *Rate* | *No.* | *Rate* |
| 1930 | 1,110 | 1.00 | 414 | 0.37 | 1940 | 1,087 | 0.83 | 256 | 0.19 |
| 1931 | 1,255 | 1.05 | 421 | 0.35 | 1941 | 1,281 | 1.02 | 372 | 0.30 |
| 1932 | 1,188 | 0.96 | 425 | 0.34 | 1942 | 1,387 | 1.09 | 431 | 0.34 |
| 1933 | 1,262 | 0.99 | 453 | 0.35 | 1943 | 1,417 | 1.11 | 436 | 0.34 |
| 1934 | 1,190 | 0.92 | 409 | 0.31 | 1944 | 1,335 | 1.06 | 364 | 0.29 |
| 1935 | 1,041 | 0.79 | 314 | 0.24 | 1945 | 1,273 | 0.99 | 337 | 0.26 |
| 1936 | 1,044 | 0.78 | 356 | 0.26 | 1946 | 1,454 | 1.01 | 297 | 0.21 |
| 1937 | 1,157 | 0.84 | 369 | 0.27 | 1947 | 1,453 | 0.97 | 293 | 0.20 |
| 1938 | 1,207 | 0.87 | 449 | 0.32 | 1948 | 1,418 | 0.93 | 232 | 0.15 |
| 1939 | 1,072 | 0.77 | 295 | 0.21 | 1949 | 1,354 | 0.87 | 222 | 0.14 |

It will be observed that the continuous decline in the primary notifications of tuberculosis from 1930 onwards for respiratory tuberculosis was arrested in 1940 and thereafter the attack rate showed a steady increase until 1943, when a decline in notifications again occurred and has slowly continued with an exception in 1946. The attack rate for respiratory tuberculosis remains at a considerably higher level than in 1939 and compares with the rates in the early nineteen thirties. In the case of non-

respiratory tuberculosis, however, the rate, notwithstanding the considerable increase during the war years, has rapidly declined and is now more favourable than at any time prior to 1940. The increase in the attack rates during the war years for both respiratory and non-respiratory tuberculosis is due partly to a real increase in the incidence of tuberculosis and partly to the fact that they tend to overstate the incidence, being based for these years on the civilian population.

### Attack Rates in relation to Age and Sex

It is possible now, with the recent publication of estimates of the population of the County by age and sex, to calculate the attack rates of tuberculosis at different ages for men and women, and by comparison with the Census figures of 1931, to arrive at an estimate of the increase or decrease of rates in age and sex groups.

The published estimates relate to December 31st, 1947, and the post-war situation is best represented by the two-year period 1947–48 with this date as its central point. The details of the pre-war population are those of the Census of 1931, and the figures in the following Table relate to the three years 1930–32 giving average attack rates for these years :—

NOTIFICATIONS OF, AND AVERAGE ANNUAL ATTACK RATES FROM, RESPIRATORY TUBERCULOSIS, 1930–32 AND 1947–48.

| *Males* | | | | *Age Group* | *Females* | | | |
|---|---|---|---|---|---|---|---|---|
| *1930–32* | | *1947–48* | | | *1930–32* | | *1947–48* | |
| *No.* | *Rate* | *No.* | *Rate* | | *No.* | *Rate* | *No.* | *Rate* |
| 27 | 0.183 | 49 | 0.368 | 0 –4 | 11 | 0.077 | 37 | 0.292 |
| 93 | 0.294 | 80 | 0.396 | 5–14 | 83 | 0.272 | 68 | 0.349 |
| 222 | 1.540 | 170 | 2.196 | 15–19 | 222 | 1.538 | 214 | 2.075 |
| 259 | 1.790 | 215 | 2.617 | 20–24 | 298 | 1.997 | 257 | 2.418 |
| 531 | 1.847 | 397 | 1.805 | 25–34 | 486 | 1.549 | 305 | 1.301 |
| 427 | 1.781 | 284 | 1.159 | 35–44 | 244 | 0.891 | 179 | 0.714 |
| 271 | 1.366 | 240 | 1.249 | 45–54 | 107 | 0.487 | 64 | 0.296 |
| 149 | 1.013 | 158 | 1.117 | 55–64 | 66 | 0.409 | 53 | 0.315 |
| 26 | 0.229 | 71 | 0.535 | 65 and over | 31 | 0.210 | 30 | 0.167 |
| 2,005 | 1.153 | 1,664 | 1.167 | Total | 1,548 | 0.833 | 1,207 | 0.764 |

In comparison with 1930–32 the all-age attack rate for 1947–48 was slightly higher for males and appreciably lower for females ; but in certain age groups there were significantly higher rates in 1947–48 for both males and females and in other age groups much lower rates than in 1930–32. The age groups to give significantly higher

rates in 1947–48 were 0–4, 15–19 and 20–24 in both males and females, and 65 and over for males. Those which were significantly less in 1947–48 were the groups between 25 and 54 for females, and the 35–44 group in males, the attack rate in the latter group showing a remarkable fall of about 35 per cent.

In so far as young adults are concerned it seems likely that the figures, at any rate amongst males, are influenced by the requirements of National Service. The 1931 Census refers to the total population resident on the Census night and includes a small number of non-civilians. The 1947 estimate, however, relates to civilians only and among young adults, a large percentage of the physically fit were still in the armed forces. If it is assumed that no cases of tuberculosis occurred amongst the population of Essex in the forces in 1947–48, new attack rates can be obtained based on the estimated total (civilian and non-civilian) population and giving the most favourable trend possible. It has been assumed also that the non-civilians normally resident in Essex are the same proportion of the total population as they are in the whole of England and Wales, and the new attack rates calculated on this basis are contained in the following Table.

THE EFFECT ON THE 1947–48 MALE ATTACK RATES OF INCLUDING NON-CIVILIANS IN THE POPULATIONS FROM WHICH THE ATTACK RATES ARE CALCULATED

| | | 1947–48. Population on which based. | |
|---|---|---|---|
| Age Group. | 1930–32. | Civilian. | Total. |
| 15–19 | 1.540 | 2.196 | 1.728 |
| 20–24 | 1.790 | 2.617 | 2.284 |
| 25–34 | 1.847 | 1.805 | 1.732 |
| 35–44 | 1.781 | 1.159 | 1.138 |

It will be noted that although the attack rates for the age groups 15–19 and 20–24 have been reduced materially, they are still considerably above the 1930–32 attack rates. The female rates are virtually unaffected. These adjustments bring the increase from 1930–32 to 1947–48 among males more closely into line with those amongst females (see diagram) suggesting a common age and sex factor.

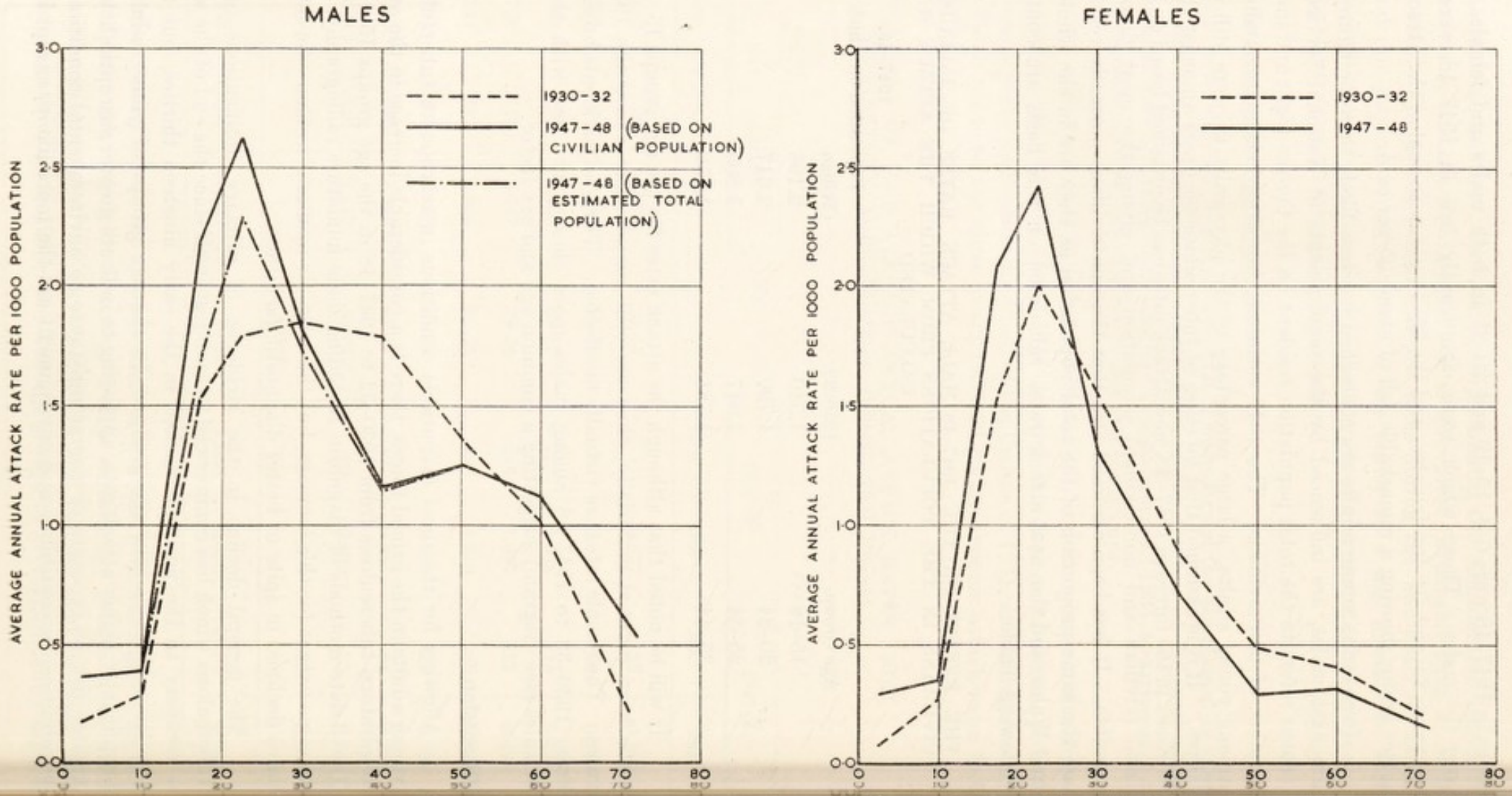
## Discussion

Allowing for the most favourable conditions in relation to tuberculosis amongst young adults in the armed forces, there is a considerable increase in the attack rates of respiratory tuberculosis from 1930–32 to 1947–48 in the age groups 15–19 and 20–24. Up-to-date methods of diagnosis, including mass miniature radiography, may account to some extent for this increase, but the rates for men and women over 30 years of age have declined in spite of better diagnostic facilities.

The general decline in the incidence of primary notifications of respiratory tuberculosis which has commenced to manifest itself since the end of the war has led to a recovery to the position reached in the early nineteen thirties, but this recovery applies only to certain age groups. In the age groups of young adults there is a significantly higher attack rate, appearing to indicate greater susceptibility to infection, greater risk of exposure or poorer resistance to environmental conditions. Of these possibilities, susceptibility and environment are the more likely, except in the case of

# RESPIRATORY TUBERCULOSIS

## AVERAGE ANNUAL ATTACK RATES IN 1930-32 AND 1947-48



workers amongst the tuberculous, and they afford an indication of the population groups requiring priority in the application of preventive measures. The working and living conditions of the young adult age groups and their medical supervision are of especial importance in relation to respiratory tuberculosis.

If and when B.C.G. vaccination is made available for general application, the 15–19 and 20–24 age groups merit priority.

## Summary

The attack rate for respiratory tuberculosis has shown a decline since the end of the war, but is still higher than it was pre-war and compares with the rates in the early thirties. The attack rate for non-respiratory tuberculosis is at a much lower level than in 1930.

The average annual attack rates for respiratory tuberculosis in 1947–48 show a slight rise for men and a slight fall for women in comparison with 1930–32.

The age groups to show significantly higher attack rates in 1947–48 as compared with 1930–32 are 0–4, 15–19, 20–24 for both males and females, and 65 and over for men. In the age groups 0–4 and 65 and over the numbers of notifications are small.

The higher attack rates in young adults point to the need for special attention to preventive measures in these age groups of the population.

TABLE I.

## BIRTHS, DEATHS, ANNUAL RATES, &c., 1949.

| Health Area and County District | Census, 1931 | | Estimated Population | Live Births | | Still Births | | Deaths at all Ages | | Infant Deaths | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Acreage | Population | | No. | Rate* | No. | Rate† | No. | Rate* | No. | Rate‡ |
| ADMINISTRATIVE COUNTY | 959,464 | 1,189,004 | 1,554,700 | 24,935 | 16.0 | 492 | 19.3 | 16,099 | 10.4 | 617 | 24.7 |
| BOROUGHS AND URBAN DISTRICTS | 256,982 | 1,004,325 | 1,333,950 | 21,220 | 15.9 | 427 | 19.7 | 13,468 | 10.1 | 544 | 25.6 |
| RURAL DISTRICTS | 702,482 | 184,679 | 220,750 | 3,715 | 16.8 | 65 | 17.2 | 2,631 | 11.9 | 73 | 19.7 |
| 1. NORTH-EAST ESSEX | 243,652 | 156,843 | 174,799 | 2,721 | 15.6 | 55 | 19.8 | 2,293 | 13.1 | 73 | 26.8 |
| Colchester B. | 12,011 | 49,131 | 52,520 | 858 | 16.4 | 16 | 18 | 576 | 11.0 | 21 | 24 |
| Harwich B. | 1,512 | 12,046 | 12,600 | 248 | 19.7 | 9 | 35 | 133 | 10.6 | 8 | 32 |
| Brightlingsea U. | 2,852 | 4,147 | 4,472 | 59 | 13.2 | — | — | 84 | 18.8 | 3 | 51 |
| Clacton-on-Sea U. | 6,470 | 16,737 | 23,030 | 274 | 11.9 | 7 | 25 | 345 | 15.0 | 7 | 26 |
| Frinton and Walton U. | 6,293 | 7,324 | 7,987 | 115 | 14.4 | 1 | 9 | 131 | 16.4 | 3 | 26 |
| Halstead U. | 1,176 | 6,012 | 6,060 | 82 | 13.5 | 4 | 47 | 93 | 15.3 | 3 | 37 |
| West Mersea U. | 3,171 | 2,067 | 3,015 | 36 | 11.9 | — | — | 48 | 15.9 | 1 | 28 |
| Wivenhoe U. | 1,493 | 2,193 | 2,435 | 44 | 18.1 | — | — | 30 | 12.3 | 2 | 45 |
| Halstead R. | 76,693 | 15,997 | 16,620 | 230 | 13.8 | 6 | 25 | 252 | 15.2 | 5 | 22 |
| Lexden and Winstree R. | 66,097 | 19,418 | 22,250 | 375 | 16.9 | 4 | 11 | 301 | 13.5 | 12 | 32 |
| Tendring R. | 65,884 | 21,771 | 23,810 | 400 | 16.8 | 8 | 20 | 300 | 12.6 | 8 | 20 |
| 2. MID-ESSEX | 459,453 | 165,617 | 204,680 | 3,460 | 16.9 | 65 | 18.4 | 2,291 | 11.2 | 79 | 22.8 |
| Chelmsford B. | 4,772 | 27,457 | 36,930 | 602 | 16.3 | 12 | 20 | 396 | 10.7 | 12 | 20 |
| Maldon B. | 4,809 | 8,542 | 9,590 | 181 | 18.9 | 4 | 22 | 122 | 12.7 | 5 | 28 |
| Saffron Walden B. | 7,502 | 5,930 | 6,980 | 109 | 15.6 | 1 | 9 | 89 | 12.8 | 2 | 18 |
| Braintree and Bocking U. | 6,812 | 13,497 | 17,450 | 308 | 17.7 | 5 | 16 | 189 | 10.8 | 11 | 36 |
| Burnham-on-Crouch U. | 5,352 | 3,492 | 3,907 | 63 | 16.1 | — | — | 57 | 14.6 | 4 | 63 |
| Witham U. | 7,329 | 6,751 | 8,363 | 131 | 15.7 | 2 | 15 | 91 | 10.9 | 6 | 46 |
| Braintree R. | 59,556 | 16,378 | 18,220 | 298 | 16.4 | 8 | 26 | 227 | 12.5 | 5 | 17 |
| Chelmsford R. | 86,506 | 27,836 | 38,540 | 690 | 17.9 | 8 | 11 | 391 | 10.1 | 11 | 16 |
| Dunmow R. | 72,487 | 15,320 | 18,740 | 270 | 14.4 | 7 | 25 | 197 | 10.5 | 7 | 26 |
| Maldon R. | 78,507 | 13,348 | 14,480 | 236 | 16.3 | 6 | 25 | 192 | 13.3 | 5 | 21 |
| Ongar R. | 47,236 | 11,523 | 14,650 | 264 | 18.0 | 6 | 22 | 145 | 9.9 | 8 | 30 |
| Saffron Walden R. | 78,585 | 15,543 | 16,830 | 308 | 18.3 | 6 | 19 | 195 | 11.6 | 3 | 10 |
| 3. SOUTH-EAST ESSEX | 81,886 | 63,707 | 100,460 | 1,675 | 16.7 | 32 | 18.7 | 1,387 | 13.8 | 52 | 31.0 |
| Benfleet U. | 6,361 | 12,091 | 19,600 | 301 | 15.4 | 7 | 23 | 281 | 14.3 | 11 | 37 |
| Billericay U. | 29,367 | 27,708 | 42,230 | 714 | 16.9 | 11 | 15 | 591 | 14.0 | 28 | 39 |
| Canvey Island U. | 4,351 | 3 532 | 10,550 | 188 | 17.8 | 6 | 31 | 129 | 12.2 | 2 | 11 |
| Rayleigh U. | 5,727 | 6,407 | 9.380 | 149 | 15.9 | 3 | 20 | 152 | 16.2 | 7 | 47 |
| Rochford R. | 36,080 | 13,969 | 18,700 | 323 | 17.3 | 5 | 15 | 234 | 12.5 | 4 | 12 |
| 4. SOUTH ESSEX | 76,361 | 124,727 | 208,830 | 3,588 | 17.2 | 76 | 20.7 | 1,926 | 9.2 | 79 | 22.0 |
| Brentwood U. | 18,269 | 23,694 | 29,580 | 439 | 14.8 | 11 | 24 | 298 | 10.1 | 8 | 18 |
| Hornchurch U. | 19,768 | 39,389 | 102,300 | 1,640 | 16.0 | 40 | 24 | 914 | 8.9 | 29 | 18 |
| Thurrock U. | 38,324 | 61,644 | 76,950 | 1,509 | 19.6 | 25 | 16 | 714 | 9.3 | 42 | 28 |
| 5. FOREST | 62,978 | 107,292 | 183,931 | 2,788 | 15.2 | 60 | 21.1 | 1,794 | 9.8 | 74 | 26.5 |
| Chingford B. | 2,868 | 22,076 | 48,510 | 684 | 14.1 | 18 | 26 | 404 | 8.3 | 17 | 25 |
| Wanstead and Woodford B. | 3,842 | 43,129 | 61,960 | 839 | 13.5 | 22 | 26 | 687 | 11.1 | 31 | 37 |
| Chigwell U. | 8,971 | 16,338 | 40,940 | 723 | 17.7 | 10 | 14 | 322 | 7.9 | 14 | 19 |
| Epping U. | 1,488 | 5,081 | 6,540 | 109 | 16.7 | 2 | 18 | 81 | 12.4 | 1 | 9 |
| Waltham Holy Cross U. | 10,958 | 7,092 | 8,071 | 112 | 13.9 | 7 | 59 | 103 | 12.8 | 6 | 54 |
| Epping R. | 34,851 | 13,576 | 17,910 | 321 | 17.9 | 1 | 31 | 197 | 11.0 | 5 | 16 |
| 6. ROMFORD | 9,342 | 37,840 | 73,640 | 1,329 | 18.0 | 29 | 21.4 | 658 | 8.9 | 22 | 16.6 |
| 7. BARKING | 3,877 | 51,270 | 79,460 | 1,328 | 16.7 | 24 | 17.8 | 735 | 9.2 | 33 | 24.8 |
| 8. DAGENHAM | 6,554 | 89,362 | 113,800 | 1,950 | 17.1 | 29 | 14.7 | 756 | 6.6 | 55 | 28.2 |
| 9. ILFORD | 8,425 | 131,061 | 185,000 | 2,630 | 14.2 | 61 | 22.7 | 1,728 | 9.3 | 53 | 20.2 |
| 10. LEYTON | 2,594 | 128,313 | 106,700 | 1,630 | 15.3 | 34 | 20.4 | 1,232 | 11.5 | 43 | 26.4 |
| 11. WALTHAMSTOW | 4,342 | 132,972 | 123,400 | 1,836 | 14.9 | 27 | 14.5 | 1,299 | 10.5 | 54 | 29.4 |

*per 1,000 estimated population; †per 1,000 total births; ‡per 1,000 live births.

TABLEE II

## CAUSES OF DEATH BY AGE, 1949

| Cause of Death | Males | | | | | | | Females | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 – | 1 – | 5 – | 15 – | 45 – | 65 – | Total | 0 – | 1 – | 5 – | 15 – | 45 – | 65 – | Total |
| 1. Typhoid and paratyphoid fever .. .. | — | — | — | — | — | — | 0 | — | — | — | — | — | — | 0 |
| 2. Cerebro-spinal fever .. .. .. | 2 | 2 | 3 | 1 | — | — | 8 | 2 | 2 | 5 | 1 | — | — | 10 |
| 3. Scarlet fever .. .. .. .. | — | — | — | — | 1 | — | 1 | — | — | — | — | — | — | 0 |
| 4. Whooping cough .. .. .. | 2 | 2 | — | — | — | — | 4 | 4 | 1 | — | — | — | — | 5 |
| 5. Diphtheria .. .. .. .. | — | 1 | — | — | — | — | 1 | — | — | — | — | — | — | 0 |
| 6. Tuberculosis—respiratory.. .. .. | — | 1 | 1 | 109 | 148 | 65 | 324 | — | 3 | — | 130 | 48 | 17 | 198 |
| 7. Tuberculosis—other forms .. .. | 1 | 11 | 3 | 10 | 8 | 4 | 37 | 1 | 7 | — | 11 | 2 | — | 21 |
| 8. Syphilitic disease .. .. .. | — | — | — | 5 | 13 | 17 | 35 | — | — | — | — | 7 | 9 | 16 |
| 9. Influenza .. .. .. .. | 1 | 2 | 2 | 8 | 19 | 58 | 90 | 1 | 1 | 1 | 5 | 14 | 86 | 108 |
| 10. Measles .. .. .. .. | 2 | 2 | 2 | 1 | — | — | 7 | — | 1 | 1 | 2 | — | — | 4 |
| 11. Acute poliomyelitis and polioencephalitis .. | 1 | 1 | 6 | 8 | — | — | 16 | — | 4 | 4 | 8 | — | — | 16 |
| 12. Acute infectious encephalitis .. .. | — | — | — | 2 | 1 | 2 | 5 | — | — | — | 1 | 1 | 1 | 3 |
| 13M Cancer of mouth and oesophagus .. .. | — | — | — | 2 | 24 | 66 | 92 | * | * | * | * | * | * | * |
| 13F Cancer of uterus .. .. .. | — | — | — | — | — | — | 0 | — | — | — | 11 | 53 | 49 | 113 |
| 14. Cancer of stomach and duodenum .. .. | — | — | — | 11 | 107 | 154 | 272 | — | — | — | 5 | 43 | 123 | 171 |
| 15. Cancer of breast .. .. .. | — | — | — | — | 1 | 2 | 3 | — | — | — | 27 | 125 | 113 | 265 |
| 16. Cancer of all other sites .. .. .. | — | 5 | 2 | 67 | 427 | 574 | 1,075 | 1 | 2 | 6 | 38 | 257 | 441 | 745 |
| 17. Diabetes .. .. .. .. | — | — | — | 4 | 6 | 27 | 37 | — | — | — | 3 | 14 | 55 | 72 |
| 18. Intra-cranial vascular lesions .. .. | — | — | — | 6 | 134 | 600 | 740 | — | — | — | 10 | 205 | 897 | 1,112 |
| 19. Heart disease .. .. .. .. | — | — | 3 | 68 | 518 | 1,878 | 2,467 | — | — | 3 | 54 | 333 | 2,062 | 2,452 |
| 20. Other circulatory diseases .. .. | — | — | — | 8 | 71 | 252 | 331 | — | 1 | — | 10 | 66 | 270 | 347 |
| 21. Bronchitis .. .. .. .. | 9 | 2 | 1 | 16 | 181 | 384 | 593 | 4 | 1 | 3 | 5 | 41 | 312 | 366 |
| 22. Pneumonia .. .. .. .. | 40 | 19 | 5 | 19 | 82 | 201 | 366 | 34 | 13 | 1 | 16 | 35 | 224 | 323 |
| 23. Other respiratory diseases .. .. | — | 2 | — | 4 | 60 | 54 | 120 | 1 | 2 | — | 15 | 29 | 39 | 86 |
| 24. Ulcer of stomach or duodenum .. .. | — | — | 1 | 12 | 66 | 53 | 132 | — | — | — | 4 | 14 | 17 | 35 |
| 25. Diarrhoea under two years .. .. | 14 | 1 | — | — | — | — | 15 | 7 | 1 | — | — | — | — | 8 |
| 26. Appendicitis .. .. .. .. | — | 3 | 4 | 9 | 3 | 4 | 23 | — | 2 | 2 | 2 | 2 | 5 | 13 |
| 27. Other digestive diseases .. .. .. | 5 | — | 3 | 7 | 40 | 70 | 125 | 3 | 3 | 3 | 10 | 45 | 84 | 148 |
| 28. Nephritis .. .. .. .. | — | — | 1 | 29 | 39 | 96 | 165 | 1 | 1 | 3 | 13 | 39 | 89 | 146 |
| 29. Puerperal and post-abortive sepsis .. | — | — | — | — | — | — | 0 | — | — | — | 5 | — | — | 5 |
| 30. Other maternal causes .. .. .. | — | — | — | — | — | — | 0 | — | — | — | 14 | — | — | 14 |
| 31. Premature birth .. .. .. | 89 | — | — | — | — | — | 89 | 58 | — | — | — | — | — | 58 |
| 32. Congenital malformation, birth injury and other infantile diseases .. .. | 150 | 5 | 3 | 8 | 8 | 2 | 176 | 139 | 2 | 2 | 11 | 9 | 10 | 173 |
| 33. Suicide .. .. .. .. | — | — | — | 23 | 41 | 22 | 86 | — | — | — | 16 | 27 | 9 | 52 |
| 34. Road traffic accidents .. .. .. | — | 2 | 12 | 46 | 22 | 26 | 108 | — | 3 | 5 | 2 | 2 | 9 | 21 |
| 35. Other violent causes .. .. .. | 14 | 10 | 8 | 29 | 22 | 34 | 117 | 11 | 4 | 1 | 11 | 17 | 58 | 102 |
| 36. All other causes .. .. .. .. | 14 | 5 | 13 | 71 | 117 | 423 | 643 | 6 | 3 | 12 | 57 | 110 | 400 | 588 |
| All Causes .. .. .. .. | 344 | 76 | 73 | 583 | 2,159 | 5,068 | 8,303 | 273 | 57 | 52 | 497 | 1,538 | 5,379 | 7,796 |

*For females, cancer of the mouth and oesophagus is included under " Cancer of all other sites ".

TABLE III.

CAUSES OF DEATH, 1949.

| Health Area and County District | Typhoid and Paratyphoid Fever | Cerebro-Spinal Fever | Scarlet Fever | Whooping Cough | Diphtheria | Tuberculosis of Respiratory System | Other Forms of Tuberculosis | Syphilitic Disease | Influenza | Measles | Acute Poliomyelitis and Poliioencephalitis | Acute Infectious Encephalitis | Cancer of Buccal Cavity and Oesophagus (Males) | Cancer of Uterus | Cancer of Stomach and Duodenum | Cancer of Breast | Cancer of all other Sites | Diabetes | Intra-Cranial Vascular Lesions | Heart Disease | Other Diseases of Circulatory System | Bronchitis | Pneumonia | Other Respiratory Diseases | Ulcer of Stomach or Duodenum | Diarrhoea (under 2 years) | Appendicitis | Other Digestive Diseases | Nephritis | Puerperal and Post Abortive Sepsis | Other Maternal Causes | Premature Birth | Congenital Malformations, Birth Injury and Infantile Disease | Suicide | Road Traffic Accidents | Other Violent Causes | All other Causes | All Causes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13M) | (13F) | (14) | (15) | (16) | (17) | (18) | (19) | (20) | (21) | (22) | (23) | (24) | (25) | (26) | (27) | (28) | (29) | (30) | (31) | (32) | (33) | (34) | (35) | (36) | |
| ADMINISTRATIVE COUNTY .. | 0 | 18 | 1 | 9 | 1 | 522 | 58 | 51 | 198 | 11 | 32 | 8 | 92 | 113 | 443 | 268 | 1,820 | 109 | 1,852 | 4,919 | 678 | 959 | 689 | 206 | 167 | 23 | 36 | 273 | 311 | 5 | 14 | 147 | 349 | 138 | 129 | 219 | 1,231 | 16,099 |
| BOROUGHS AND URBAN DISTRICTS | 0 | 16 | 1 | 7 | 1 | 466 | 50 | 43 | 158 | 9 | 27 | 4 | 73 | 100 | 379 | 224 | 1,558 | 84 | 1,518 | 4,058 | 569 | 842 | 584 | 172 | 146 | 19 | 34 | 231 | 263 | 5 | 13 | 125 | 310 | 113 | 103 | 186 | 977 | 13,468 |
| RURAL DISTRICTS .. .. .. | 0 | 2 | 0 | 2 | 0 | 56 | 8 | 8 | 40 | 2 | 5 | 4 | 19 | 13 | 64 | 44 | 262 | 25 | 334 | 861 | 109 | 117 | 105 | 34 | 21 | 4 | 2 | 42 | 48 | 0 | 1 | 22 | 39 | 25 | 26 | 33 | 254 | 2,631 |
| 1. NORTH-EAST ESSEX .. | 0 | 2 | 0 | 0 | 0 | 52 | 13 | 4 | 43 | 1 | 0 | 2 | 12 | 13 | 60 | 32 | 237 | 20 | 295 | 766 | 78 | 82 | 65 | 33 | 21 | 2 | 2 | 41 | 70 | 2 | 2 | 16 | 44 | 24 | 16 | 28 | 215 | 2,293 |
| Colchester B. .. .. | — | — | — | — | — | 16 | 1 | — | 9 | — | — | — | 2 | 6 | 13 | 5 | 58 | 4 | 74 | 200 | 18 | 23 | 18 | 8 | 5 | 1 | — | 14 | 17 | 1 | 1 | 3 | 13 | 6 | 6 | 8 | 36 | 576 |
| Harwich B. .. .. | — | — | — | — | — | 4 | — | — | 3 | — | — | — | 2 | — | 5 | 1 | 17 | 2 | 16 | 42 | 1 | 2 | 5 | 2 | 2 | — | 1 | 2 | 8 | — | — | 3 | 6 | 1 | 1 | — | 7 | 133 |
| Brightlingsea U. .. .. | — | — | — | — | — | 1 | 1 | — | 1 | — | — | — | — | — | 1 | 1 | 7 | 2 | 11 | 32 | 4 | 2 | 3 | — | — | — | — | 1 | 6 | — | — | — | 3 | 1 | — | 1 | 6 | 84 |
| Clacton-on-Sea U. .. | — | — | — | — | — | 8 | 5 | 1 | 13 | — | — | — | 1 | 3 | 9 | 9 | 34 | — | 41 | 126 | 11 | 8 | 9 | 6 | 3 | — | 1 | 7 | 6 | 1 | — | 3 | 2 | 1 | 1 | 6 | 30 | 345 |
| Frinton and Walton U. .. | — | — | — | — | — | 2 | 1 | 1 | 2 | — | — | — | 1 | — | 3 | 2 | 17 | 1 | 14 | 38 | 6 | 4 | 4 | 3 | 2 | — | — | 1 | 10 | — | — | 1 | 1 | 1 | 1 | 4 | 11 | 131 |
| Halstead U. .. .. | — | — | — | — | — | 3 | — | — | 1 | — | — | — | — | — | 5 | 1 | 4 | — | 9 | 12 | 5 | 2 | — | 2 | 1 | — | — | 1 | 2 | — | — | 1 | — | 3 | 1 | 2 | 20 | 93 |
| West Mersea U. .. .. | — | — | — | — | — | 2 | — | — | 1 | 1 | — | — | — | — | 2 | 1 | 14 | — | 3 | 14 | 1 | — | — | — | — | 1 | — | — | — | — | — | — | 1 | — | — | — | 3 | 48 |
| Wivenhoe U. .. .. | — | 1 | — | — | — | 1 | — | — | 2 | — | — | — | — | 1 | — | 1 | 1 | — | 9 | 27 | 2 | 1 | 2 | 1 | 1 | — | — | 1 | 2 | — | — | 1 | — | 3 | 1 | 2 | 2 | 30 |
| Halstead R. .. .. | — | — | — | — | — | 7 | 3 | — | 2 | — | — | 1 | 2 | 1 | 6 | 4 | 26 | 1 | 30 | 80 | 11 | 13 | 6 | 2 | 3 | — | — | 3 | 7 | — | — | 3 | 1 | 4 | — | 3 | 33 | 252 |
| Lexden and Winstree R. | — | 1 | — | — | — | 5 | 2 | 1 | 6 | — | — | — | 2 | 1 | 13 | 2 | 36 | 3 | 32 | 104 | 14 | 15 | 12 | 4 | 3 | — | — | 3 | 3 | — | — | — | 9 | 4 | 1 | 1 | 24 | 301 |
| Tendring R. .. .. | — | — | — | — | — | 3 | — | 1 | 3 | — | — | 1 | 2 | 1 | 3 | 5 | 24 | 5 | 51 | 91 | 5 | 12 | 6 | 5 | 1 | — | — | 7 | 11 | — | 1 | 2 | 7 | 3 | 4 | 3 | 43 | 300 |
| 2. MID-ESSEX .. .. .. | 0 | 1 | 1 | 1 | 0 | 57 | 6 | 5 | 33 | 2 | 7 | 1 | 17 | 13 | 62 | 32 | 230 | 21 | 295 | 735 | 94 | 97 | 97 | 29 | 20 | 4 | 4 | 40 | 42 | 0 | 2 | 27 | 41 | 19 | 19 | 38 | 199 | 2,291 |
| Chelmsford B. .. .. | — | — | 1 | — | — | 12 | 1 | 1 | — | 1 | — | — | 5 | 2 | 13 | 4 | 40 | — | 42 | 111 | 16 | 22 | 25 | 7 | 4 | — | — | 11 | 9 | — | 1 | 3 | 9 | 6 | 3 | 10 | 37 | 396 |
| Maldon B. .. .. | — | — | — | — | — | 4 | 1 | — | 1 | — | — | — | — | 1 | 7 | 1 | 12 | 1 | 17 | 46 | 5 | 4 | 7 | — | — | — | 1 | 3 | — | — | — | 2 | 4 | 1 | 1 | 1 | 2 | 122 |
| Saffron Walden B. .. | — | 1 | — | — | — | 1 | — | — | 5 | — | 1 | — | — | — | 1 | 1 | 7 | — | 13 | 36 | 2 | 2 | 3 | 1 | — | — | — | 2 | 4 | — | — | 1 | — | — | — | — | 8 | 89 |
| Braintree and Bocking U. | — | — | — | — | — | 5 | 1 | — | 4 | — | — | — | — | 1 | 4 | 1 | 18 | 4 | 33 | 53 | — | 5 | 6 | 6 | 3 | 1 | 1 | 3 | 2 | — | — | 4 | 5 | 1 | — | 1 | 28 | 189 |
| Burnham-on-Crouch U. .. | — | — | — | — | — | 2 | — | — | 1 | — | — | — | — | 1 | 3 | — | 8 | — | 7 | 13 | 4 | 2 | 1 | 1 | — | 1 | — | 1 | 2 | — | — | — | 3 | — | — | 2 | 5 | 57 |
| Witham U. .. .. | — | — | — | — | — | 1 | — | — | — | — | 1 | — | — | — | 2 | 1 | 9 | — | 10 | 30 | 6 | 7 | 1 | — | — | — | — | 2 | 3 | — | 1 | 2 | 3 | 1 | — | 2 | 9 | 91 |
| Braintree R. .. .. | — | — | — | — | — | 4 | 1 | — | 6 | — | 1 | — | 1 | — | 6 | 7 | 26 | 5 | 27 | 87 | 4 | 10 | 6 | 1 | 3 | — | — | 2 | 5 | — | — | 5 | 2 | 2 | 1 | 4 | 15 | 227 |
| Chelmsford R. .. .. | — | — | — | — | — | 14 | — | 1 | 7 | — | — | 1 | 4 | 2 | 8 | 7 | 41 | 2 | 54 | 112 | 18 | 18 | 19 | 3 | 3 | 1 | 1 | 6 | 5 | — | — | 5 | 6 | 3 | 6 | 6 | 38 | 391 |
| Dunmow R. .. .. | — | — | — | — | — | 4 | 1 | 1 | 2 | — | — | — | 2 | 1 | 4 | 1 | 16 | 1 | 23 | 54 | 14 | 6 | 15 | 2 | 3 | — | 1 | 4 | 8 | — | — | 1 | 3 | 2 | 3 | 4 | 21 | 197 |
| Maldon R. .. .. | — | — | — | — | — | 5 | 1 | 1 | 1 | 1 | — | — | 3 | 1 | 6 | 1 | 17 | 1 | 28 | 75 | 11 | 7 | 5 | 3 | 1 | 1 | — | 2 | — | — | — | 4 | 1 | 1 | 3 | 2 | 10 | 192 |
| Ongar R. .. .. | — | — | — | 1 | — | 2 | — | — | 3 | — | 2 | — | 1 | 3 | 4 | 3 | 16 | 2 | 11 | 56 | 7 | 8 | 6 | — | 2 | — | — | — | 2 | — | — | 1 | 4 | 1 | — | 1 | 9 | 145 |
| Saffron Walden R. .. | — | — | — | — | — | 3 | 1 | 1 | 3 | — | 2 | — | 1 | 1 | 4 | 5 | 20 | 5 | 30 | 63 | 7 | 6 | 3 | 5 | 1 | — | — | 4 | 2 | — | — | 2 | 1 | 1 | 2 | 5 | 17 | 195 |
| 3. SOUTH-EAST ESSEX .. | 0 | 0 | 0 | 3 | 0 | 43 | 3 | 7 | 13 | 3 | 1 | 0 | 7 | 9 | 46 | 27 | 147 | 3 | 163 | 459 | 61 | 83 | 73 | 14 | 14 | 1 | 1 | 20 | 20 | 0 | 0 | 7 | 33 | 10 | 12 | 15 | 89 | 1,387 |
| Benfleet U. .. .. | — | — | — | — | — | 11 | — | 1 | 4 | — | — | — | 2 | 1 | 8 | 4 | 31 | — | 42 | 96 | 10 | 14 | 10 | — | 5 | — | — | 3 | 4 | — | — | 2 | 8 | 2 | 2 | 4 | 17 | 281 |
| Billericay U. .. .. | — | — | — | 2 | — | 17 | 1 | 4 | 3 | 1 | 1 | — | 3 | 5 | 24 | 11 | 80 | 1 | 39 | 189 | 29 | 33 | 32 | 6 | 3 | 1 | 1 | 6 | 9 | — | — | 4 | 14 | 3 | 7 | 5 | 37 | 591 |
| Canvey Island U. .. | — | — | — | — | — | 3 | 1 | — | — | — | — | — | 1 | — | 4 | 3 | 9 | 2 | 17 | 55 | 2 | 10 | 6 | 1 | 3 | — | — | 2 | 1 | — | — | — | 2 | — | 1 | 2 | 4 | 129 |
| Rayleigh U. .. .. | — | — | — | — | — | 4 | 1 | 1 | 2 | 1 | — | — | 1 | 2 | 4 | 3 | 6 | — | 23 | 40 | 9 | 14 | 6 | 1 | 3 | — | — | 5 | 3 | — | — | — | 6 | 1 | 1 | 1 | 14 | 152 |
| Rochford R. .. .. | — | — | — | 1 | — | 8 | — | 1 | 4 | 1 | — | — | — | 1 | 6 | 6 | 21 | — | 22 | 79 | 11 | 12 | 19 | 6 | — | — | — | 4 | 3 | — | — | 1 | 3 | 4 | 1 | 3 | 17 | 234 |
| 4. SOUTH ESSEX .. .. | 0 | 8 | 0 | 2 | 0 | 71 | 4 | 6 | 13 | 2 | 3 | 1 | 18 | 19 | 53 | 22 | 233 | 12 | 211 | 588 | 88 | 105 | 76 | 18 | 20 | 4 | 9 | 27 | 45 | 0 | 2 | 23 | 39 | 10 | 21 | 34 | 138 | 1,926 |
| Brentwood U. .. .. | — | — | — | 1 | — | 14 | — | 1 | 1 | 1 | 1 | — | 1 | 3 | 10 | 1 | 28 | 1 | 30 | 96 | 13 | 14 | 16 | 3 | — | — | 1 | 5 | 7 | — | — | 1 | 8 | 3 | 3 | 5 | 30 | 298 |
| Hornchurch U. .. .. | — | 6 | — | — | — | 33 | 2 | 2 | 9 | 1 | 1 | 1 | 8 | 13 | 19 | 14 | 126 | 4 | 116 | 253 | 35 | 65 | 31 | 6 | 13 | — | 6 | 10 | 18 | — | 1 | 9 | 21 | 3 | 11 | 8 | 69 | 914 |
| Thurrock U. .. .. | — | 2 | — | 1 | — | 24 | 2 | 3 | 3 | — | 1 | — | 9 | 3 | 24 | 7 | 79 | 8 | 65 | 239 | 40 | 26 | 29 | 9 | 7 | 4 | 2 | 12 | 20 | — | 1 | 13 | 10 | 4 | 7 | 21 | 39 | 714 |
| 5. FOREST .. .. .. | 0 | 5 | 0 | 0 | 0 | 59 | 3 | 5 | 24 | 1 | 3 | 2 | 10 | 13 | 48 | 37 | 207 | 10 | 213 | 482 | 96 | 106 | 77 | 26 | 22 | 4 | 0 | 41 | 21 | 2 | 2 | 17 | 50 | 16 | 21 | 21 | 150 | 1,794 |
| Chingford B. .. .. | — | 1 | — | — | — | 15 | — | 1 | 9 | — | — | — | 2 | 5 | 11 | 9 | 45 | 3 | 45 | 100 | 26 | 20 | 19 | 8 | 4 | — | — | 9 | 5 | — | — | 1 | 16 | 5 | 3 | 9 | 33 | 404 |
| Wanstead and Woodford B. | — | 1 | — | — | — | 20 | 1 | 2 | 6 | 1 | — | 1 | 5 | 4 | 24 | 11 | 75 | 4 | 88 | 195 | 38 | 53 | 27 | 9 | 7 | 2 | — | 12 | 7 | 1 | — | 9 | 19 | 5 | 5 | 6 | 49 | 687 |
| Chigwell U. .. .. | — | — | — | — | — | 15 | 1 | 1 | 4 | — | 2 | — | 2 | 1 | 6 | 8 | 59 | 2 | 37 | 75 | 13 | 17 | 17 | 4 | 8 | — | — | 8 | 6 | 1 | 1 | 4 | 7 | 1 | 7 | 5 | 19 | 322 |
| Epping U. .. .. | — | 1 | — | — | — | 5 | — | — | 1 | — | — | — | — | 2 | 1 | 5 | 8 | 1 | 4 | 25 | 7 | 2 | 3 | 2 | 2 | — | 1 | 2 | — | — | — | — | 2 | 2 | 1 | — | 5 | 81 |
| Waltham Holy Cross U. | — | 1 | — | — | — | 3 | 1 | — | 1 | — | 1 | — | — | — | 2 | 1 | 10 | — | 13 | 27 | 5 | 4 | 3 | — | — | — | — | 3 | 1 | — | 1 | 2 | 4 | 3 | — | — | 17 | 103 |
| Epping R. .. .. | — | 1 | — | — | — | 1 | — | 1 | 3 | — | — | 1 | 1 | 1 | 4 | 3 | 19 | — | 26 | 60 | 7 | 10 | 8 | 3 | 1 | 2 | — | 7 | 2 | — | — | 1 | 2 | — | 5 | 1 | 27 | 197 |
| 6. ROMFORD .. .. .. | 0 | 0 | 0 | 0 | 0 | 28 | 3 | 2 | 9 | 0 | 3 | 1 | 3 | 4 | 22 | 12 | 69 | 4 | 69 | 208 | 25 | 45 | 25 | 4 | 8 | 1 | 1 | 8 | 13 | 0 | 1 | 6 | 11 | 7 | 9 | 8 | 49 | 658 |
| 7. BARKING .. .. .. | 0 | 0 | 0 | 0 | 1 | 39 | 2 | 3 | 8 | 0 | 3 | 0 | 4 | 4 | 12 | 6 | 83 | 5 | 73 | 211 | 38 | 62 | 44 | 9 | 5 | 0 | 3 | 11 | 12 | 0 | 2 | 9 | 16 | 12 | 2 | 10 | 46 | 735 |
| 8. DAGENHAM .. .. .. | 0 | 1 | 0 | 1 | 0 | 48 | 7 | 2 | 5 | 1 | 3 | 0 | 4 | 7 | 23 | 9 | 110 | 6 | 40 | 187 | 27 | 59 | 44 | 14 | 5 | 0 | 4 | 14 | 15 | 0 | 0 | 18 | 27 | 4 | 7 | 8 | 56 | 756 |
| 9. ILFORD .. .. .. | 0 | 1 | 0 | 1 | 0 | 48 | 5 | 2 | 18 | 1 | 4 | 0 | 6 | 14 | 43 | 36 | 229 | 13 | 220 | 552 | 79 | 95 | 62 | 24 | 17 | 1 | 4 | 28 | 39 | 1 | 1 | 9 | 30 | 16 | 9 | 17 | 112 | 1,728 |
| 10. LEYTON .. .. .. | 0 | 0 | 0 | 0 | 0 | 33 | 4 | 8 | 16 | 0 | 1 | 1 | 6 | 7 | 40 | 33 | 146 | 6 | 140 | 361 | 43 | 116 | 59 | 11 | 17 | 4 | 3 | 22 | 10 | 0 | 0 | 10 | 21 | 13 | 7 | 17 | 83 | 1,232 |
| 11. WALTHAMSTOW .. .. | 0 | 0 | 0 | 1 | 0 | 44 | 8 | 7 | 16 | 0 | 4 | 0 | 5 | 10 | 34 | 22 | 138 | 8 | 133 | 370 | 49 | 115 | 67 | 24 | 18 | 2 | 5 | 21 | 24 | 0 | 2 | 5 | 37 | 7 | 6 | 23 | 94 | 1,299 |

TABLE IV.

## MORTALITY IN COUNTY DISTRICTS AND HEALTH AREAS 1946–49

| *Health Area and County District* | *Crude Death Rate* | *Comparability Factor* | *Standardised Rate* | *Significance* |
|---|---|---|---|---|
| ADMINISTRATIVE COUNTY .. .. | 10.21 | 1.01 | 10.3 | |
| 1. NORTH-EAST ESSEX .. .. | 12.59 | 0.81 | 10.2 | |
| Colchester B. .. .. .. | 11.12 | 0.91 | 10.1 | |
| Harwich B. .. .. .. | 11.80 | 0.99 | 11.7 | High |
| Brightlingsea U. .. .. .. | 16.18 | 0.64 | 10.4 | |
| Clacton-on-Sea U. .. .. .. | 14.50 | 0.71 | 10.3 | |
| Frinton and Walton U. .. .. | 14.44 | 0.72 | 10.4 | |
| Halstead U. .. .. .. .. | 13.23 | 0.82 | 10.8 | |
| West Mersea U. .. .. .. | 16.57 | 0.69 | 11.4 | |
| Wivenhoe U. .. .. .. | 13.63 | 0.75 | 10.2 | |
| Halstead R. .. .. .. .. | 13.86 | 0.75 | 10.4 | |
| Lexden and Winstree R. .. .. | 12.17 | 0.77 | 9.4 | Low |
| Tendring R. .. .. .. | 11.92 | 0.80 | 9.5 | Low |
| 2. MID-ESSEX: .. .. .. | 11.36 | 0.88 | 10.0 | Low |
| Chelmsford B. .. .. .. | 9.80 | 1.03 | 10.1 | |
| Maldon B. .. .. .. .. | 12.70 | 0.76 | 9.7 | |
| Saffron Walden B. .. .. .. | 14.17 | 0.82 | 11.6 | |
| Braintree and Bocking U. .. .. | 11.20 | 0.87 | 9.7 | |
| Burnham-on-Crouch U. .. .. | 13.92 | 0.76 | 10.6 | |
| Witham U. .. .. .. .. | 9.84 | 1.03 | 10.1 | |
| Braintree R. .. .. .. .. | 12.54 | 0.78 | 9.8 | |
| Chelmsford R. .. .. .. | 10.71 | 0.90 | 9.6 | Low |
| Dunmow R. .. .. .. | 11.74 | 0.89 | 10.4 | |
| Maldon R. .. .. .. .. | 12.95 | 0.78 | 10.1 | |
| Ongar R. .. .. .. .. | 10.70 | 0.98 | 10.5 | |
| Saffron Walden R. .. .. .. | 12.16 | 0.79 | 9.6 | |
| 3. SOUTH-EAST ESSEX .. .. | 13.26 | 0.78 | 10.3 | |
| Benfleet U. .. .. .. .. | 14.15 | 0.74 | 10.5 | |
| Billericay U. .. .. .. | 12.70 | 0.80 | 10.2 | |
| Canvey Island U. .. .. .. | 13.44 | 0.81 | 10.9 | |
| Rayleigh U. .. .. .. | 13.58 | 0.77 | 10.5 | |
| Rochford R. .. .. .. | 13.30 | 0.77 | 10.2 | |
| 4. SOUTH ESSEX .. .. .. | 9.05 | 1.13 | 10.2 | |
| Brentwood U. .. .. .. | 10.63 | 0.91 | 9.7 | |
| Hornchurch U. .. .. .. | 8.60 | 1.19 | 10.2 | |
| Thurrock U. .. .. .. | 9.03 | 1.16 | 10.5 | |
| 5. FOREST .. .. .. .. | 9.84 | 1.03 | 10.1 | |
| Chingford B. .. .. .. | 7.96 | 1.21 | 9.6 | Low |
| Wanstead and Woodford B. .. .. | 10.82 | 0.97 | 10.5 | |
| Chigwell U. .. .. .. | 9.03 | 1.03 | 9.3 | Low |
| Epping U. .. .. .. .. | 12.09 | 0.86 | 10.4 | |
| Waltham Holy Cross U. .. .. | 11.67 | 1.01 | 11.8 | |
| Epping R. .. .. .. .. | 11.37 | 0.92 | 10.5 | |
| 6. ROMFORD .. .. .. | 9.14 | 1.21 | 11.1 | High |
| 7. BARKING .. .. .. .. | 8.40 | 1.35 | 11.3 | High |
| 8. DAGENHAM .. .. .. | 6.48 | 1.65 | 10.7 | |
| 9. ILFORD .. .. .. .. | 9.19 | 1.07 | 9.8 | Low |
| 10. LEYTON .. .. .. .. | 11.44 | 0.97 | 11.1 | High |
| 11. WALTHAMSTOW .. .. .. | 10.66 | 1.05 | 11.2 | High |

**TABLE V—Showing the results of the tests made on Ice Cream supplies during 1949.**

| District | Methylene Blue Test Ministry of Health Gradings | | | | | | Plate Count Test | | | Coliform Test | | | Bact. Coli. Test | | | No. of samples satisfactory | No. of samples unsatisfactory | Total No. of all Samples | Percentage of samples unsatisfactory (bacteriological results) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | Ungraded | Total | Satisfactory | Unsatisfactory | Total | Satisfactory | Unsatisfactory | Total | Satisfactory | Unsatisfactory | Total | | | | |
| *Health Department, E.C.C. | 63 | 17 | — | — | — | 80 | 80 | — | 80 | 71 | 9 | 80 | 80 | — | 80 | 80 | — | 80 | — |
| *Barking B. .. .. .. | 58 | 27 | 10 | 9 | — | 104 | 97 | 7 | 104 | 65 | 39 | 104 | 99 | 5 | 104 | 79 | 25 | 104 | 24.0 |
| *Benfleet U. .. .. | 6 | 5 | 2 | 2 | — | 15 | 14 | 1 | 15 | 7 | 8 | 15 | 14 | 1 | 15 | 12 | 3 | 15 | 20.0 |
| *Billericay U. .. .. | 5 | 5 | 8 | 4 | 2 | 24 | 22 | 2 | 24 | 15 | 9 | 24 | 24 | — | 24 | 22 | 2 | 24 | 8.3 |
| *Braintree and Bocking U. | 20 | 13 | 4 | 7 | — | 44 | 39 | 5 | 44 | 29 | 15 | 44 | 42 | 2 | 44 | 36 | 8 | 44 | 18.2 |
| *Brentwood U. .. .. | 11 | 5 | 8 | 10 | — | 34 | 28 | 6 | 34 | 13 | 21 | 34 | 33 | 1 | 34 | 23 | 11 | 34 | 32.4 |
| †Brightlingsea U. .. .. | 4 | 1 | — | — | — | 5 | — | — | — | — | — | — | — | — | — | — | — | 5 | — |
| *Canvey Island U. .. .. | 8 | 6 | 1 | 4 | — | 19 | 17 | 2 | 19 | 10 | 9 | 19 | 17 | 2 | 19 | 15 | 4 | 19 | 21.1 |
| *Chelmsford B. .. .. | 107 | 38 | 17 | 18 | — | 180 | 171 | 9 | 180 | 137 | 43 | 180 | 176 | 4 | 180 | 164 | 16 | 180 | 8.9 |
| *Chigwell U... .. .. | 38 | 10 | 8 | 4 | 1 | 61 | 58 | 3 | 61 | 42 | 19 | 61 | 59 | 2 | 61 | 54 | 7 | 61 | 11.5 |
| *Chingford B. .. .. | 36 | 18 | 8 | 4 | — | 66 | 65 | 1 | 66 | 41 | 25 | 66 | 63 | 3 | 66 | 59 | 7 | 66 | 10.6 |
| *Clacton-on-Sea U. .. | 16 | 14 | 9 | 7 | — | 46 | 41 | 5 | 46 | 27 | 19 | 46 | 45 | 1 | 46 | 37 | 9 | 46 | 19.6 |
| † ,, .. | 3 | — | — | — | 1 | 4 | — | — | — | — | — | — | — | — | — | — | — | 4 | — |
| *Colchester B. .. .. | 45 | 23 | 12 | 13 | — | 93 | 83 | 10 | 93 | 53 | 40 | 93 | 87 | 6 | 93 | 77 | 16 | 93 | 17.2 |
| † ,, .. .. | 26 | 6 | — | — | — | 32 | — | — | — | — | — | — | — | — | — | — | — | 32 | — |
| *Dagenham B. .. .. | 45 | 23 | 11 | 10 | 2 | 91 | 85 | 6 | 91 | 59 | 32 | 91 | 90 | 1 | 91 | 82 | 9 | 91 | 9.9 |
| *Epping U. .. .. .. | 9 | 6 | 9 | 2 | — | 26 | 25 | 1 | 26 | 15 | 11 | 26 | 25 | 1 | 26 | 21 | 5 | 26 | 19.2 |
| *Frinton and Walton U. .. | 11 | 4 | 1 | 1 | — | 17 | 15 | 2 | 17 | 14 | 3 | 17 | 17 | — | 17 | 14 | 3 | 17 | 17.6 |
| *Harwich B. .. .. .. | 12 | — | — | — | — | 12 | 12 | — | 12 | 12 | — | 12 | 12 | — | 12 | 12 | — | 12 | — |
| *Hornchurch U. .. .. | 59 | 30 | 7 | 8 | 1 | 105 | 100 | 5 | 105 | 67 | 38 | 105 | 102 | 3 | 105 | 94 | 11 | 105 | 10.5 |
| *Ilford B. .. .. .. | 43 | 49 | 31 | 17 | — | 140 | 126 | 14 | 140 | 70 | 70 | 140 | 136 | 4 | 140 | 113 | 27 | 140 | 19.3 |
| *Leyton B. .. .. .. | 17 | 18 | 5 | 10 | — | 50 | 46 | 4 | 50 | 24 | 26 | 50 | 46 | 4 | 50 | 37 | 13 | 50 | 26.0 |
| *Maldon B. .. .. .. | 5 | 8 | 5 | 1 | — | 19 | 18 | 1 | 19 | 7 | 12 | 19 | 19 | — | 19 | 17 | 2 | 19 | 10.5 |
| *Rayleigh U. .. .. | 4 | 3 | 2 | 2 | — | 11 | 11 | — | 11 | 6 | 5 | 11 | 11 | — | 11 | 9 | 2 | 11 | 18.2 |
| *Romford B. .. .. .. | 33 | 18 | 4 | 6 | — | 61 | 58 | 3 | 61 | 41 | 20 | 61 | 59 | 2 | 61 | 56 | 5 | 61 | 8.2 |
| *Thurrock U. .. .. | 39 | 16 | 7 | 5 | 1 | 68 | 65 | 3 | 68 | 45 | 23 | 68 | 67 | 1 | 68 | 64 | 4 | 68 | 5.9 |
| † ,, .. .. | 23 | 3 | 1 | 4 | — | 31 | — | — | — | — | — | — | — | — | — | — | — | 31 | — |
| *Waltham Holy Cross U. | 1 | 1 | 2 | 1 | — | 5 | 4 | 1 | 5 | — | 5 | 5 | 5 | — | 5 | 4 | 1 | 5 | 20.0 |
| *Walthamstow B. .. .. | 57 | 36 | 8 | 13 | — | 114 | 109 | 5 | 114 | 71 | 43 | 114 | 113 | 1 | 114 | 108 | 6 | 114 | 5.3 |
| *Wanstead and Woodford B. | 70 | 29 | 28 | 7 | 1 | 135 | 126 | 9 | 135 | 80 | 55 | 135 | 132 | 3 | 135 | 120 | 15 | 135 | 11.1 |
| *Witham U. .. .. .. | 30 | 21 | 4 | 3 | 1 | 59 | 58 | 1 | 59 | 42 | 17 | 59 | 54 | 5 | 59 | 52 | 7 | 59 | 11.9 |
| †Wivenhoe .. .. .. | 3 | — | — | — | — | 3 | — | — | — | — | — | — | — | — | — | — | — | 3 | — |
| *Braintree R. .. .. | 48 | 20 | 10 | 9 | — | 87 | 76 | 11 | 87 | 67 | 20 | 87 | 87 | — | 87 | 76 | 11 | 87 | 12.6 |
| *Chelmsford R. .. .. | 13 | — | 3 | 1 | — | 17 | 17 | — | 17 | 12 | 5 | 17 | 17 | — | 17 | 17 | — | 17 | — |
| *Dunmow R. .. .. | — | 2 | — | — | — | 2 | 2 | — | 2 | — | 2 | 2 | 2 | — | 2 | 2 | — | 2 | — |
| *Epping R. .. .. .. | 25 | 14 | 13 | 1 | — | 53 | 51 | 2 | 53 | 35 | 18 | 53 | 53 | — | 53 | 51 | 2 | 53 | 3.8 |
| *Halstead R. .. .. | 2 | — | — | — | — | 2 | 2 | — | 2 | 2 | — | 2 | 2 | — | 2 | 2 | — | 2 | — |
| *Ongar R. .. .. .. | 7 | 5 | 2 | 2 | — | 16 | 14 | 2 | 16 | 7 | 9 | 16 | 16 | — | 16 | 13 | 3 | 16 | 18.8 |
| †Rochford R. .. .. | 2 | — | 1 | — | — | 3 | — | — | — | — | — | — | — | — | — | — | — | 3 | — |
| *Saffron Walden R. .. | 6 | 6 | — | 3 | — | 15 | 13 | 2 | 15 | 7 | 8 | 15 | 13 | 2 | 15 | 11 | 4 | 15 | 26.7 |
| † ,, .. | 6 | — | — | — | — | 6 | — | — | — | — | — | — | — | — | — | — | — | 6 | — |
| Totals .. .. | 1016 | 500 | 241 | 188 | 10 | 1955 | 1748 | 123 | 1871 | 1193 | 678 | 1871 | 1817 | 54 | 1871 | 1633 | 238 | 1955 | 12.7 |
| 1948 .. .. | 389 | 381 | 249 | 225 | 27 | 1271 | 1138 | 133 | 1271 | 724 | 547 | 1271 | 1176 | 95 | 1271 | 1096 | 175 | 1271 | 13.8 |

*Counties Public Health Laboratories. †National Public Health Laboratories.

This table is based upon the number of ice cream reports received.

TABLE VI

## NOTIFICATIONS OF INFECTIOUS DISEASE—1949

| | Health Area and County District | Scarlet Fever | Whooping Cough | Diphtheria | Measles | Acute Pneumonia | Cerebro-Spinal Fever | Acute Poliomyelitis | Acute Polio-encephalitis | Encephalitis Lethargica | Dysentery | Ophthalmia Neonatorum | Puerperal Pyrexia | Smallpox | Paratyphoid Fever | Enteric Fever | Erysipelas | Malaria | Food Poisoning | Others* | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ADMINISTRATIVE COUNTY .. | 2,368 | 3,884 | 7 | 15,712 | 1,268 | 32 | 316 | 29 | — | 79 | 25 | 157 | — | 13 | 10 | 311 | 8 | 357 | 335 | 24,911 |
| | BOROUGHS AND URBAN DISTRICTS | 2,167 | 3,498 | 7 | 12,772 | 1,164 | 24 | 247 | 27 | — | 73 | 24 | 143 | — | 11 | 8 | 279 | 7 | 340 | 310 | 21,101 |
| | RURAL DISTRICTS .. .. .. | 201 | 386 | — | 2,940 | 104 | 8 | 69 | 2 | — | 6 | 1 | 14 | — | 2 | 2 | 32 | 1 | 17 | 25 | 3,810 |
| 1. | NORTH-EAST ESSEX .. | 204 | 304 | — | 1,776 | 73 | 2 | 16 | — | — | 8 | — | 10 | — | — | — | 13 | 2 | 1 | 126 | 2,535 |
| | Colchester B. .. .. | 79 | 39 | — | 331 | 20 | — | 5 | — | — | 3 | — | 8 | — | — | — | 6 | 1 | — | 19 | 511 |
| | Harwich B. .. .. | 5 | 1 | — | 2 | 2 | — | 3 | — | — | 3 | — | 1 | — | — | — | — | — | — | 3 | 20 |
| | Brightlingsea U. .. .. | 1 | 5 | — | 12 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 18 |
| | Clacton-on-Sea U. .. | 18 | 33 | — | 78 | — | — | 1 | — | — | — | — | 1 | — | — | — | — | — | — | 33 | 164 |
| | Frinton and Walton U. .. | 3 | 13 | — | 138 | 4 | — | 3 | — | — | — | — | — | — | — | — | — | — | 1 | 35 | 197 |
| | Halstead U. .. .. | 2 | 16 | — | 18 | 4 | — | — | — | — | — | — | — | — | — | — | — | — | — | 17 | 57 |
| | West Mersea U. .. .. | 2 | 52 | — | 71 | 4 | — | — | — | — | — | — | — | — | — | — | — | — | — | 1 | 130 |
| | Wivenhoe U. .. .. | 23 | 3 | — | 57 | 2 | 1 | — | — | — | — | — | — | — | — | — | — | — | — | — | 86 |
| | Halstead R. .. .. | 4 | 20 | — | 506 | 12 | — | 4 | — | — | — | — | — | — | — | — | 3 | — | — | 1 | 550 |
| | Lexden and Winstree R. | 42 | 61 | — | 261 | 20 | 1 | — | — | — | 1 | — | — | — | — | — | 3 | 1 | — | 11 | 401 |
| | Tendring R. .. .. | 25 | 61 | — | 302 | 5 | — | — | — | — | 1 | — | — | — | — | — | 1 | — | — | 6 | 401 |
| 2. | MID-ESSEX .. .. .. | 111 | 334 | — | 1,940 | 108 | 6 | 66 | 12 | — | 3 | 1 | 9 | — | 3 | 3 | 31 | — | 31 | 112 | 2,770 |
| | Chelmsford B. .. .. | 15 | 72 | — | 253 | 13 | 1 | 9 | 9 | — | 1 | — | 2 | — | 1 | 2 | 1 | — | — | 78 | 457 |
| | Maldon B. .. .. | 3 | 37 | — | 76 | 25 | — | — | — | — | — | — | — | — | — | — | 3 | — | 17 | 28 | 189 |
| | Saffron Walden B. .. | 8 | 7 | — | 6 | — | 1 | 2 | — | — | — | — | — | — | — | — | — | — | — | — | 24 |
| | Braintree and Bocking U. | 5 | 26 | — | 48 | — | — | — | — | — | — | — | — | — | — | — | 1 | — | — | — | 80 |
| | Burnham-on-Crouch U. .. | 2 | 6 | — | 38 | 7 | — | — | 1 | — | — | — | — | — | — | — | 3 | — | — | — | 57 |
| | Witham U. .. .. | 3 | 13 | — | 183 | 5 | — | 9 | — | — | — | — | — | — | — | — | 1 | — | — | — | 214 |
| | Braintree R. .. .. | 6 | 28 | — | 222 | 5 | — | 3 | — | — | — | 1 | 4 | — | 1 | — | 2 | — | — | — | 272 |
| | Chelmsford R. .. .. | 21 | 43 | — | 380 | 20 | 2 | 7 | — | — | — | — | 1 | — | — | — | 9 | — | 4 | 2 | 489 |
| | Dunmow R. .. .. | 15 | 10 | — | 290 | 13 | — | 2 | — | — | 1 | — | — | — | — | — | 1 | — | — | — | 332 |
| | Maldon R. .. .. | 11 | 15 | — | 107 | 14 | 1 | 1 | — | — | — | — | 1 | — | — | — | 8 | — | 6 | — | 164 |
| | Ongar R. .. .. | 12 | 28 | — | 61 | 5 | — | 6 | 1 | — | — | — | — | — | 1 | 1 | 2 | — | 4 | 1 | 122 |
| | Saffron Walden R. .. | 10 | 49 | — | 276 | 1 | 1 | 27 | 1 | — | 1 | — | 1 | — | — | — | — | — | — | 3 | 370 |
| 3. | SOUTH-EAST ESSEX .. | 141 | 268 | — | 1,282 | 65 | 3 | 19 | — | — | — | 1 | 11 | — | — | 2 | 17 | — | 31 | 14 | 1,854 |
| | Benfleet U. .. .. | 52 | 48 | — | 266 | 12 | — | 1 | — | — | — | — | 1 | — | — | — | 5 | — | 9 | 3 | 397 |
| | Billericay U. .. .. | 41 | 188 | — | 635 | 44 | 1 | 14 | — | — | — | 1 | 3 | — | — | 1 | 3 | — | 19 | 4 | 954 |
| | Canvey Island U. .. | 1 | 2 | — | 62 | 2 | — | 2 | — | — | — | — | — | — | — | — | 1 | — | — | 7 | 77 |
| | Rayleigh U. .. .. | 5 | 7 | — | 60 | 3 | — | 2 | — | — | — | — | — | — | — | — | 6 | — | 1 | — | 84 |
| | Rochford R. .. .. | 42 | 23 | — | 259 | 4 | 2 | — | — | — | — | — | 7 | — | — | 1 | 2 | — | 2 | — | 342 |
| 4. | SOUTH ESSEX .. .. | 338 | 625 | 4 | 2,822 | 151 | 9 | 32 | 3 | — | 40 | — | 15 | — | 2 | 1 | 30 | 1 | 37 | 70 | 4,180 |
| | Brentwood U. .. .. | 27 | 88 | — | 617 | 17 | — | 16 | 1 | — | 2 | — | — | — | — | — | 4 | — | — | 9 | 781 |
| | Hornchurch U. .. .. | 211 | 291 | 3 | 1,719 | 49 | 7 | 9 | 2 | — | 1 | — | 4 | — | 2 | — | 17 | — | 5 | 16 | 2,336 |
| | Thurrock U. .. .. | 100 | 246 | 1 | 486 | 85 | 2 | 7 | — | — | 37 | — | 11 | — | — | 1 | 9 | 1 | 32 | 45 | 1,063 |
| 5. | FOREST .. .. .. | 223 | 570 | 2 | 2,327 | 154 | 1 | 64 | 7 | — | 18 | 1 | 8 | — | — | 2 | 46 | 3 | 78 | 3 | 3,507 |
| | Chingford B. .. .. | 105 | 174 | 1 | 499 | 83 | — | 4 | 1 | — | 3 | 1 | 4 | — | — | — | 17 | — | 34 | 1 | 927 |
| | Wanstead and Woodford B. | 51 | 167 | — | 800 | 42 | — | 7 | 4 | — | 2 | — | 3 | — | — | 1 | 12 | 3 | 36 | — | 1,128 |
| | Chigwell U. .. .. | 44 | 155 | 1 | 540 | 15 | — | 26 | 2 | — | — | — | 1 | — | — | 1 | 14 | — | 7 | — | 806 |
| | Epping U. .. .. | 4 | 16 | — | 10 | 4 | — | 2 | — | — | 11 | — | — | — | — | — | 2 | — | — | 1 | 50 |
| | Waltham Holy Cross U. | 6 | 10 | — | 202 | 5 | — | 6 | — | — | — | — | — | — | — | — | — | — | — | — | 229 |
| | Epping R. .. .. | 13 | 48 | — | 276 | 5 | 1 | 19 | — | — | 2 | — | — | — | — | — | 1 | — | 1 | 1 | 367 |
| 6. | ROMFORD .. .. .. | 198 | 248 | — | 1,116 | 51 | 2 | 11 | — | — | — | 1 | 19 | — | — | — | 16 | — | 9 | — | 1,671 |
| 7. | BARKING .. .. .. | 172 | 226 | 1 | 603 | 65 | — | 15 | — | — | 4 | 5 | 18 | — | 1 | — | 21 | — | 35 | — | 1,166 |
| 8. | DAGENHAM .. .. .. | 275 | 201 | — | 603 | 37 | 4 | 26 | 1 | — | — | 12 | 6 | — | — | — | 19 | 1 | 12 | — | 1,197 |
| 9. | ILFORD .. .. .. | 380 | 566 | — | 662 | 222 | — | 31 | 2 | — | 1 | 1 | 35 | — | 1 | — | 47 | 1 | 80 | 10 | 2,039 |
| 10. | LEYTON .. .. .. | 144 | 316 | — | 1,031 | 241 | 2 | 18 | 2 | — | 2 | 2 | 9 | — | 2 | — | 37 | — | 28 | — | 1,834 |
| 11. | WALTHAMSTOW .. .. | 182 | 226 | — | 1,550 | 101 | 3 | 18 | 2 | — | 3 | 1 | 17 | — | 4 | 2 | 34 | — | 15 | — | 2,158 |

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