[Report 1926] / Medical Officer of Health, Essex County Council.

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ADMINISTRATIVE COUNTY OF ESSEX.

REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR 1926.

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

COUNTY MEDICAL OFFICER OF HEALTH.

Chelmsford:
PRINTED BY JOHN DUTTON, 8, TINDAL STREET.

INDEX.

PREFACE.

To the Chairman and Members of the Public Health and Housing Committee of the Essex County Council.

I have the honour to submit to you my Eighth Annual Report for the Administrative County for the year 1926. This is the 37th Report which has been issued, and at the request of the Ministry of Health is devoted in the main to a summing up of the year's work for which the County Council is primarily responsible. Consequently, the report does not give the same detail as in last year's Survey Report.

The following table presents a comparative summary of the position in the Administrative County in respect to Birth-rate, Death-rate, and Infant Mortality :—

	1926.			1921-1925.		
	Birth-rate.	Death-rate.	Infantile Mortality.	Birth-rate.	Death-rate.	Infantile Mortality.
Essex ...	16·8	9·9	52	18·3	10·4	53
England & Wales	17·8	11·6	70	19·9	12·2	76

The Birth-rate continues to decline, but fortunately the Death-rate remains low so that there is still a natural increase of population each year.

Steady progress and consolidation in the health administration of the County marked the year 1926. The Medical, Nursing and Clerical Staff have been strengthened with excellent results. The report of Dr. Pearse, an Inspector of the Ministry of Health, on Combined Medical Service in Essex, given on pages 32 to 38 is very interesting. A synthesis or re-union of the various health services in a suitably sized area under a common administration is the main objective in modern health administration.

The campaign against Tuberculosis has been strengthened during 1926 in various ways, the most important being the appointment of Dr. W. Burton Wood, a member of the Honorary Staff at the Victoria Park Hospital, London, as Consulting Officer for Pulmonary Tuberculosis. This appointment has abundantly justified itself.

The County lost the services of Dr. A. G. Wilkins after a short but honourable service, particularly in connection with Harold Court Sanatorium.

One of the most important health projects of recent years is the playing-field movement. Every village and hamlet should have a playing-field kept in decent order for games for young and old of both sexes.

The loss of life and health associated with childbirth is likely to be reduced by the appointment of an Obstetric Specialist and arrangements for institutional treatment.

The campaign for Clean Milk has been pursued with great activity, and Essex may regard itself as a pioneer in this most important health movement.

The number of new houses erected continues to be satisfactory but a great many more are required to relieve overcrowding and to replace insanitary dwellings.

I desire again to record my high appreciation of the co-operation and counsel of yourself and members of the Committee during my eighth year of office. Unfortunately, my predecessor, Dr. J. C. Thresh, was stricken with illness during the year which deprived us of his unrivalled knowledge and experience in County Public Health matters. I am indebted to the Medical Officers of Health and other officials of the Local Sanitary Authorities for their co-operation, and to the Medical, Dental, Nursing and Clerical Staffs for their loyal services.

I am especially indebted to the Chief Assistant Medical Officer, Dr. T. P. Puddicombe, the County Sanitary Inspector, Mr. A. Marsh, and to the Chief Clerk, Mr. J. Colman, for their loyalty and help throughout the year.

W. A. BULLOUGH,
County Medical Officer.

PUBLIC HEALTH DEPARTMENT,
DUKE STREET,
CHELMSFORD:

10th June, 1927.

PUBLIC HEALTH AND HOUSING COMMITTEE.

Chairman—Alderman S. W. Robinson.

Vice-Chairman—Councillor A. M. Mathews.

Aldermen—	Councillors—
J. H. Burrows	P. Astins
W. S. Chisenhale-Marsh	Dr. J. P. Atkinson
C. E. Gooch	F. P. Brindley
Sir Christopher G. Musgrave	A. W. Bristow
E. W. Tanner	A. Brooks
	Major E. N. Buxton
	B. C. Custerson
	C. W. Daines
	C. Eves
	A. G. Giller
	W. A. Hurry
	J. Parish
	W. T. Potts
	C. S. Richardson
	F. D. Smith
	Major A. P. W. Wedd
	Miss F. Wilde
	E. G. Wright
	E. J. Wythes

MEDICAL AND NURSING SERVICES JOINT SUB-COMMITTEE.

Aldermen—	Councillors—
J. H. Burrows (*Chairman*)	Dr. J. P. Atkinson
S. W. Robinson	Major E. N. Buxton
	E. A. Hibbs
	W. A. Hurry
	A. M. Mathews
	E. J. Wythes

Miss U. B. Chisenhale-Marsh.

TABLE I.

SHOWING RECORD OF RECEIPT OF ANNUAL REPORT FOR 1926 FROM EACH LOCAL MEDICAL OFFICER OF HEALTH.

Sanitary District.	Medical Officer of Health.	Date Annual Report received.
Urban—		
Barking ...	... Kerr Simpson ...	
Braintree ...	... P. J. Gaffikin ...	
Brentwood ...	... *S. Frazer	
Brightlingsea ...	... *E. P. Dicken... ...	
Buckhurst Hill...	... *C. R. Dykes	31st May, 1927
Burnham-on-Crouch	... *T. D. White	
Canvey Island ...	... *J. N. Wheatley ...	20th May, 1927
Chelmsford B. ...	... R. H. Vercoe	
Chingford ..	... M. Barker	
Clacton-on- Sea	... W. A Milne	31st May, 1927
Colchester B. ...	... W. F. Corfield ...	
,, Port	... *T. C. Brentnall ...	12th April, 1927
Dagenham ...	... +A. Ball	20th May, 1927
Epping ...	... *H. A. Watney ...	
Frinton-on-Sea ..	... *G. Craigie Bell ..	
Grays ...	.. W. T. G. Boul ...	
Halstead ...	... J. S. Ranson... ...	
Harwich B. ...	... *G. Ford Porter ...	
,, Port ...	... * ,, ...	12th April, 1927
Hornchurch ...	... A. Ball	
Ilford B. ...	... A. H. G. Burton ...	31st May, 1927
Leyton B. ...	... J. F. Taylor	
Loughton ...	. . *A. Butler Harris ...	20th May, 1927
Maldon B. ...	... *H. Reynolds Brown ...	
,, Port ...	... ,, ...	
Romford ...	... A. Ball	20th May, 1927
Saffron Walden B.	... S. R. Richardson ...	
Shoeburyness ...	... N. S. R. Lorraine ...	
Tilbury ...	... W. T. G. Boul ...	
Waltham Holy Cross	... *P. Streatfield ...	20th May, 1927
Walthamstow ...	... J. J. Clarke	
Walton-on-the-Naze	... *J. C. Brockwell ...	
Wanstead ...	... *P. Macgregor ...	
West Mersea ...	... W. H. Alderton ...	
Witham ...	... ‡E. C. Gimson ...	20th May, 1927
Wivenhoe ...	... *G. T. Kevern ...	12th April, 1927
Woodford ...	... *R. Vere Hodge ...	20th May, 1927

*Part-time Medical Officer of Health.

+Succeeded by Dr. E. W. C. Thomas on 4th April, 1927.

‡ ,, Dr. J. S. Bradshaw on 20th May, 1927.

Sanitary District.	Medical Officer of Health.	Date Annual Report received.
Rural—		
Belchamp ...	... J. S. Ranson ...	
Billericay ...	... *J. Douglas Wells ...	
Braintree ...	... P. J. Gaffikin ...	
Bumpstead ...	... A. Morgan ...	
Chelmsford ...	.. J. Macdonald ...	12th April, 1927
Dunmow ...	... P. J. Gaffikin ...	
Epping ...	... *W. F. Erskine ...	
Halstead ...	... J. S. Ranson... ...	
Lexden and Winstree	... W. H. Alderton ...	
Maldon ...	... J. Macdonald ...	20th May, 1927
Ongar ...	... *A. S. David	
Orsett ...	... *W. Allingham ...	
Rochford ...	... J. Macdonald ...	20th May, 1927
Romford ...	... A. Ball	31st May, 1927
Saffron Walden...	... S. R. Richardson ...	
Stansted ...	... R. F. Dunn ...	
Tendring ...	... J. Ramsbottom ...	

*Part-time Medical Officer of Health.

STAFF

On 31st December, 1926.

(1) Medical.

(*a*) *County Medical Officer, School Medical Officer & Chief Tuberculosis Officer*—
W. A. Bullough, M.B., Ch.B., M.Sc., D.P.H.

(*b*) *Chief Assistant County Medical Officer*—
T. P. Puddicombe, D.S.O., M.B., B.S., M.R.C.S., L.R.C.P., D.P.H.

(*c*) *Senior Clinical (part-time) Tuberculosis Officer*—
W. B. Wood, M.A., M.D., B.Ch., M.R.C.P., D.P.H.

(*d*) *Assistant County Medical Officers*, performing combined duties of School Medical Inspector, Tuberculosis Officer and Child Welfare Officer for County Council, and also holding the appointment of Local Medical Officer of Health under Combined Medical Service Scheme—

Name.	Qualifications.	Centre.
W. H. Alderton ..	M.C., M.R.C.S., L.R.C.P., D.P.H.	Lexden and Winstree
M. Barker	M.R.C.S., L.R.C.P., D.P.H. ..	Chingford
P. J. Gaffikin	M.C., M.D., B.Ch., B.A.O., D.P.H..	Braintree
N. S. R. Lorraine ..	M.D., Ch.B., D.P.H., F.R.S. (Edin.)	Shoeburyness
W. A. Milne	M.B., Ch.B., D.P.H.	Clacton
J. Ramsbottom ..	M.B., Ch.B., D.P.H.	Tendring
J. S. Ranson	M.R.C.S., L.R.C.P., D.P.H. ..	Halstead
S. R. Richardson ..	B.A., M.D , B.Ch., B.A.O., D.P.H..	Saffron Walden
R. H. Vercoe	B.A., M.R.C.S., L.R.C.P., D.P.H..	Chelmsford (S.M.I. only for County Council)
W. T. G. Boul.. ..	M.D., Ch.B., D.P.H.	Grays

(*e*) *School Medical Inspectors and Child Welfare Officers (Whole-time County Council)*—

Maud Bennett (Miss) ..	L.R.C.P., L.R.C.S.	Orsett
M. D. Rankine (Miss) ..	M.B., Ch.B., D.P.H.	Braintree
E. U. Vawdrey (Mrs.) ..	L.R.C.P., L.F.P.S.	Woodford
Charlotte H. Brown (Mrs.)	L.R.C.P., L.R.C.S., M.D. (Brux.) ..	Romford

(*f*) *Tuberculosis Officers*—

(i) *Consulting Surgeon in Surgical Tuberculosis*—
Sir Henry J. Gauvain, M.C., M.A., M.D., B.Ch., M.R.C.S., L.R.C.P.

(ii) *Whole-time. (County Council).*

P. L. T. Bennett ..	M.R.C.S., L.R.C.P., T.D.D., D.P.H.	Leyton
L. S. Fry	B.A., M.B., Ch.B., M.R.C.S., L.R.C.P., D.P.H.	Epping (also acts as S.M.I. & C.W.M.O.)
W. Harvey	M.D., B.Ch., D.P.H.	Brentwood (also acts as S.M.I. & C.W.M.O.)
J. Sorley	M.A., M.D., D.P.H., LLB. ..	Walthamstow
A. G. Wilkins	M.B., Ch.B.	Harold Court San. Romford
W. L. Yell	M.B., Ch.B., D.P.H.	Ilford

(iii) *Part-time. (County Council).*

Name.	Qualifications.	Centre.
W. F. Corfield.. ..	M.D., D.P.H. ..	.. Colchester
K. Simpson	M.D., M.R.C.P., D.P.H...	.. Barking

(See also *d*).

(*g*) *County Bacteriologist*—

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

(2) County Sanitary Inspector:

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

(3) Health Visitors.

Chief Health Nurse: D. M. Landon, Gen. Training, Cert. Mid. & R.S.I.
(Also County Superintendent, Essex County Nursing Association).

(*a*) *Whole-time County Council.*

Centre.	Name.	Qualifications.	Duties undertaken. T.B.	S.N.	C.W.
Stansted	Chittenden, A. E.	Gen. Training & Cert. Midwife	Yes	Yes	Yes
Braintree	Skey, A. F.	Gen. Training & Cert. Midwife	,,	,,	,,
Brentwood	White, G. M.	H.V. Cert. Gen. Training & Cert. Midwife	,,	,,	,,
Billericay	Hinton, A. L.	Board of Education Cert. & Cert. Mid.	,,	,,	,,
Tendring	Wallace, A. C. G.	Gen. Training & Cert. Midwife	,,	,,	,,
,,	Steele, M	Gen. Training	,,	,,	,,
Dunmow	Bright, R.	,, & Cert. Mid.	,,	,,	,,
Epping	Myers, S. J.	,, ,,	,,	,,	,,
Halstead	Jossaume, J.	,, ,,	,,	,,	,,
Maldon	Clapson, C. R.	,, ,,	,,	,,	,,
Maldon R. and Burnham	Tansley, B. M.	,, ,,	,,	,,	,,
Maldon R. (North)	Meachen, N. V.	,, ,,	,,	,,	,,
Ongar	Mann, R. L.	San. Training & Cert. Midwife	,,	,,	,,
Saffron Walden	Woodman, E. M.	Gen. Training & Cert. Midwife	,,	,,	,,
Belchamp	Starr, G. M.	,, ,,	,,	,,	,,
Witham	Watson, H. J.	,, ,,	,,	,,	,,
Rochford	Smith, E. M.	,, ,,	,,	,,	,,
,,	Richardson, P. M.	,, ,, & R.S.I.	,,	,,	,,
Chingford	Waterhouse, M.	King's College Cert.	,,	,,	,,
Buckhurst Hill	Glover, E.	Gen. Training, Cert. Midwife & R.S.I.	,,	,,	,,

Centre.	Name.	Qualifications.	Duties undertaken for C.C. T.B.	S.N.	C.W.
Chelmsford	Franks, E. L.	Gen. Training & Cert. Midwife	,,	,,	No
Woodford	Carnall, E. F.	Gen. Training	,,	,,	,,
Orsett	Wall, A. D.	,,	,,	,,	,,
Romford	Newby, A. E.	,,	,,	,,	,,
,,	Philpott, A. F.	,, & Cert. Mid.	,,	,,	,,
Dagenham	Richards, E. F.	Board of Education Cert. & Cert. Mid.	,,	,,	,,

(b) Whole-time Tuberculosis Nurses.

Ilford	Martin, M.	Gen. Training	,,	No	,,
Leyton	Griffin, M. W.	Board of Education Cert., Cert. Mid. & R.S.I.	,,	,,	,,
,,	Lamborn, E.	Gen. Training, Cert. Mid. & R.S.I.	,,	,,	,,
,,	Prior, E. G.	Gen. Training & Cert. Midwife	,,	,,	,,
Walthamstow	Purves, D.	Sanatorium Training	,,	,,	,,
,,	Brightman, A.	Gen. Training	,,	,,	,,
,,	Davenport, M.	,, Cert. Mid. & R.S.I.			

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

Lexden and Winstree and Wivenhoe	Ling, L. E.	Gen. Training & Cert. Midwife	Yes	Yes	Yes
Lexden and Winstree	Jackson, M. J.	,, ,,	,,	,,	No
Grays	Moorman, E. H.	Gen. Training	,,	,,	,,
,,	Button, E. L.	Cert. Mid. & experience as H. V.	,,	,,	,,
Tilbury	Marsh, E. J.	Gen. Training & Cert. Midwife	,,	,,	,,
,,	Page, S. V. B.	,, ,,	,,	,,	,,
Colchester	Sasse, A. W.	Experience as H.V.	,,	No	,,
Harwich	Cockin, E. J.	Gen. Training & Cert. Mid. & R.S.I.	,,	,,	,,

(d) District Nurses acting as Health Visitors.

Clacton	Webb, B. V.	Gen. Training & Cert. Midwife	,,	Yes	No
Walton-on-the-Naze	Sollars, A.	Cert. Mid.	,,	,,	Yes

PART I.

POPULATION.

The population of the Administrative County at the Census in 1921 was 920,141. The Registrar-General has again furnished separate figures in connection with the estimated population for the year ended 31st December, 1926, namely:—

(1) For calculating birth-rate, the figure which includes civilian and military population is 997,600

(2) For calculating the death-rate, the figure which includes only civilian population is 991,700

A common population figure (estimated) was, however, furnished by the Registrar-General for every Sanitary District, with the exception of Colchester Borough, Harwich Borough, Shoeburyness Urban District, and Billericay Rural District, each of which contains an appreciable non-civilian population.

The following changes in the Sanitary Districts have taken place during the year 1926; two urban districts have received Charters of Incorporation, viz., Ilford and Leyton, and the following new urban districts were constituted:—

Canvey Island,	formerly in	Rochford Rural District.
Dagenham,	,,	Romford ,,
Hornchurch,	,,	Romford ,,
West Mersea	,,	Lexden & Winstree Rural District.

The usual Summary, showing average number of persons per acre and acres per person, is set out below:—

TABLE II.

	Area in Acres, 1921.	Population.			Persons per acre. (Calculated on Census figures).	Acres per person. (Calculated on Census figures).
		Census 1921.	Estimated Population, 1926.			
			For Birth-rate.	For Death-rate.		
Municipal Boroughs (7)	37,606	303,296	326,724	321,624	8·06	0·12
Urban Districts (27)	85,400	366,752	388,210	387,610	4·29	0·23
Rural ,, (17)	841,437	250,093	282,666	282,466	0·30	3·36
	964,443	920,141	997,600	991,700	0·95	1·05

VITAL STATISTICS.

Birth-rate.

The birth-rate for the Administrative County was 16·8 for 1926, as compared with 17·1 for 1925; the rate for England and Wales for the year 1926 being 17·8.

Table XXVI. in Part IV. gives the following highest and lowest rates:—

Highest.			Lowest.		
Dagenham U.	...	32·8	Canvey Island U.	...	8·2
*Tilbury U. ...	...	23·0	*Frinton-on-Sea U.	...	9·5
*Romford R.	...	21.8	West Mersea U.	...	10·0
*Barking U.	...	21·0	Clacton-on-Sea U.	...	11·7
*Shoeburyness U.	...	20·2			

Similar remarks in regard to those districts marked with an asterisk were made in the Report for 1925.

Death-rate.

The death-rate from all causes in the Administrative County for 1926 was 9·9, as against 11·6 for England and Wales and 10·3 for the County last year.

On page 14 Table III. is given, showing the rates for the various Sanitary Districts from which the following highest and lowest rates are quoted:—

Highest.			Lowest.		
Wivenhoe U.	...	16·3	Canvey Island U.	...	6·2
Bumpstead R.	...	14·5	West Mersea U.	...	6·5
Halstead U.	...	14·1	Frinton-on-Sea U.	...	8·1
Ongar R. ...	...	13·2	Chingford U. ...	...	8·5

Infant Mortality.

The infant mortality-rate for the Administrative County was 52 for the year 1926, as compared with 52 for 1925, the average for the previous five years being 53. The rate for England and Wales for the year 1926 was 70.

In Belchamp R. and West Mersea U. no deaths of infants under one year of age occurred, whilst the following districts record the low rates shown:—

Loughton U.	...	8
Brightlingsea U.	...	17
Braintree U.	...	19
Stansted R.	...	21
Braintree R.	...	25

On page 14 Table III. sets out the rates for each Sanitary District.

TABLE III.

SHOWING THE BIRTH-RATE, DEATH-RATE AND INFANT MORTALITY FOR THE YEAR 1926 AND THE AVERAGE FOR THE 5 YEARS 1921-25.

SANITARY DISTRICTS.	Birth-rate.		Death-rate.		Infantile Mortality.			
						1926.		
	1926.	1921-25.	1926.	1921-25.	1926.	Legitimate.	Illegitimate.	1921-25 (Average).
URBAN—								
Barking	21·0	23·6	9·4	9·8	60	57	154	69
Braintree ...	14·7	17·8	10·1	11·7	19	19	—	36
Brentwood ...	12·6	15·9	9·8	10·4	67	59	200	56
Brightlingsea ...	13·8	16·7	10·9	12·3	17	17	—	49
Buckhurst Hill ...	14·8	17·6	7·9	10·3	32	27	250	56
Burnham-on-Crouch	15·2	14·1	12·3	13·0	38	40	—	52
Canvey Island ..	8·2	—	6·2	—	111	121	—	—
Chelmsford B. ...	15·4	17·1	10·2	9·9	62	58	222	41
Chingford ...	19·8	17·9	8·5	9·6	44	45	—	53
Clacton-on-Sea .	11·7	13·0	9·1	10·1	63	59	167	29
Colchester B. ...	16·2	18·1	10·6	10·5	62	63	45	53
Dagenham ...	32·8	—	9·5	—	93	90	300	—
Epping	13·8	15·4	11·4	12·6	47	48	—	60
Frinton-on-Sea ...	9·5	12·8	8·1	6·7	50	—	333	43
Grays	19·2	20·7	10·3	9·6	47	42	143	52
Halstead ...	13·4	17·2	14·1	12·3	51	53	—	53
Harwich B. ...	18·7	21·6	9·4	10·6	48	50	—	61
Hornchurch ..	17·5	—	10·7	—	59	59	—	—
Ilford B.	15·0	16·8	8·3	9·2	45	43	147	48
Leyton B. ...	15·6	17·5	9·7	9·9	65	63	134	56
Loughton ...	18·6	16·0	7·4	9·6	8	9	—	17
Maldon B. ...	15·6	16·0	10·3	12·2	72	74	—	35
Romford	15·8	18·0	11·1	11·1	58	47	227	53
Saffron Walden B. ...	12·3	14·5	12·5	13·5	45	49	—	62
Shoeburyness ...	20·2	21·7	9·4	9·2	51	54	—	55
Tilbury	23·0	24·9	8·9	9·3	68	67	83	61
Waltham Holy Cross	14·5	16·9	11·3	9·9	50	52	—	48
Walthamstow ...	17·7	19·2	9·2	9·8	45	44	122	56
Walton-on-the-Naze	12·7	14·6	11.6	9·9	29	—	×	66
Wanstead ...	12·3	13·5	10·5	9·8	44	35	1000	32
West Mersea ...	10·0	—	6·5	—	—	—	—	—
Witham	15·8	16·6	10·8	12·6	32	32	—	71
Wivenhoe ...	13·2	15·6	15·3	13·8	67	69	—	52
Woodford ...	13·6	16·2	9·5	9·3	20	17	77	42
Total—								
Urban	16·8	18·1	9·6	10·0	55	53	124	54
RURAL—								
Belchamp ...	19·9	17·5	9·9	14·2	—	—	—	60
Billericay ...	16·8	17·1	9·9	10·5	57	50	200	51
Braintree ...	12·5	15·7	11·9	13·4	25	13	333	44
Bumpstead ...	19·3	17·8	14·5	14·5	68	71	—	37
Chelmsford ...	16·3	18·2	10·8	11·1	41	36	130	48
Dunmow	15·4	15·8	11·9	12·9	39	36	111	52
Epping	16·2	17·6	10·3	10·9	48	45	125	46
Halstead	14·1	15·2	11·1	12·2	37	38	—	45
Lexden and Winstree	16·4	16·2	11·1	11·6	37	35	66	51
Maldon	14·6	16·9	11·9	11·4	50	53	—	50
Ongar	19·3	20·6	13·2	11·1	66	53	300	43
Orsett	16·1	19·7	8·9	9·2	33	31	77	53
Rochford .	18·8	19·6	10·8	11·4	62	55	357	52
Romford	21.8	25·2	8·8	10·2	63	63	59	58
Saffron Walden ...	15·7	17·4	13·0	13·7	39	35	111	59
Stansted	13·4	17·1	12·0	12·0	21	22	—	39
Tendring... ...	18·2	18·6	11·4	10·7	39	30	210	49
Totals—								
Rural	16·8	18·6	10·8	11·3	46	42	146	51
Urban	16·8	18·1	9·6	10·0	55	53	124	54
Adminis. County ...	16·8	18·3	9·9	10·4	52	49	131	53

× In this district 1 illegitimate child born in 1925 died within a year of its birth.

NOTIFICATIONS OF INFECTIOUS DISEASE.

In Table XXVIII. of Part IV. is given a summary of notifications of Infectious Diseases received in the various Sanitary Districts during the year.

Small-pox.

There is no change in the small-pox hospital accommodation in the Administrative County, which was fully set out in my report for the year 1925.

The London County Council has kindly continued the arrangements whereby the services of their small-pox expert, Dr. W. McConnell Wanklyn are placed at the disposal of any Medical Officer of Health on application to me (Tel. No. Chelmsford 120) or in case of emergency by communicating direct with Dr. Wanklyn at :—

Office, Hop 5,000; Private, Riverside 2,678.

During the year 1926, Dr. Wanklyn's services were utilised on two occasions, the diagnosis proving negative in each instance.

Diphtheria.

The following table shows the number of notifications and deaths from Diphtheria in the Administrative County during the last five years :—

Year.	Notifications.	Deaths.	Case Mortality per cent.
1922 ...	1,351 ...	121 ...	9·0
1923 ...	869 ...	39 ...	4·4
1924 ...	959 ...	42 ...	4·4
1925 ...	1,082 ...	50 ...	4·6
1926 ...	1,362 ...	59 ...	4·3

Special reference was made to the incidence of this disease in my Annual Report for the year 1923, particularly in regard to the experience in the use of the Schick test at two of the County Sanatoria where outbreaks of Diphtheria had occurred. The value of this test in determining the susceptibility of individuals to the disease, followed by the immunisation of such persons, is now generally appreciated as a preventive measure of importance. Further research is being carried on and the Schick test can now be safely administered to children of all ages in addition to adults.

The Schick test has been used on a very large scale in America and in a few places in this country. It does appear that a very effective and safe weapon has been found to prevent mortality from diphtheria, particularly amongst children of tender years.

ISOLATION HOSPITALS.

As the returns from the hospitals have not been received at the time of going to press the usual table has been omitted.

Details of the conditions under which the County Council make a grant of £5 per bed in buildings erected by the hospital authorities out of loans were set out last year. Since then the Council has agreed to make a grant on application from the hospital authorities concerned of £2 10s. per bed in buildings erected out of revenue, subject to similar conditions being complied with and the sanction of the Ministry of Health obtained. For the year ending 31st March, 1927, grants for beds provided out of revenue had been made to the following isolation hospital authorities:—

Colchester (40 beds), Halstead (4 beds), Orsett (4 beds).

Little more need be added to what was said in my previous report regarding the economic and other advantages to be derived by "pooling" the available hospital accommodation. The use of motor ambulances has completely changed the size of the area which can be served by efficient, up-to-date isolation hospitals. Each hospital should endeavour to deal with Typhoid, Puerperal Fever, Infantile Paralysis, etc., as well as Scarlet Fever and Diphtheria.

VENEREAL DISEASES.

Scheme.

The arrangements under the London and Home Counties Scheme whereby Essex patients can utilise the Venereal Diseases Clinics established at, or in connection with, the principal London hospitals, have been continued. In addition, facilities for advice and treatment are available at the Colchester, Chelmsford, Southend-on-Sea and Ipswich hospitals. During 1926, the Kent County Council established an *ad hoc* clinic in Gravesend which has been utilised by patients from the Grays and Tilbury Urban Districts. A summary of the treatment centres available for Essex patients, with details as to the day and time of clinics, etc., is available on application to the County Health Department, Duke Street, Chelmsford.

The efforts made to establish a clinic in Leyton or Walthamstow for patients unable to attend the London hospitals have not yet been successful. Negotiations are still proceeding and it is hoped to be able to report definitely next year.

During 1926 the Ilford Venereal Diseases Propaganda Committee decided to disband. The Committee had been in existence about seven years and had done splendid work. As far as possible the work will be continued by the Propaganda Sub-Committee of the County Council.

Treatment of Venereal Disease, Year 1926.

Treatment Centre.	Patients from all Areas. Total No. treated for first time.	ESSEX PATIENTS.										
		Total Number treated for first time suffering from					Total Attendance of Essex Patients.	In-patient. Days.	Doses of Arseno-Benzol Compounds.			Hostels.
		Syphilis.	Soft Chancre.	Gonorrhœa.	Not V.D.	Total.			Out-Patients	In-Patients	Total.	In-patient days.
London Hospitals	26,712	177	3	419	364	963	15007	2743	1693		1693	1403
St. Bartholomew's, London	485	1	—	1	—	2	39	—	11	—	11	—
Chelmsford ...	22	11	—	9	2	22	121	40	65	—	65	—
Colchester ...	65	23	3	27	11	64	1687	—	225	—	225	—
Ipswich ..	192	3	3	2	1	9	163	53	21	3	24	—
Southend ..	272	11	1	20	24	56	820	5	80	—	80	—
Gravesend ...	371	11	—	19	6	36	536	—	83	—	83	—
Total for 1926...	28,119	237	10	497	408	1152	18373	2841	485	3	2181	1403
Total for 1925...	27,296	272	10	389	397	1068	18116	2937	464	—	2281	1767
Total for 1924...	26,519	318	11	469	371	1169	17262	3140	574	—	2011	1990
,, 1923 ...	26,665	290	13	413	259	975	15063	2983	—	—	2026	—
,, 1922 ...	24,895	323	11	416	238	988	14145	3192	—	—	2420	2260
,, 1921 ...	26,892	394	13	426	278	1111	14546	3197	—	—	3044	197

TABLE V.

Shewing Number and Type of Specimens examined by the County Bacteriologist—Year 1926.

Sanitary Districts.	Diphtheria.	Sputa.	Typhoid	Ringworm.	Miscellaneous.	Total Specimens examined.
Urban—						
Barking	365	227	7	4	2	605
Braintree	102	78	9	23	4	216
Brentwood	103	77	3	36	1	220
Brightlingsea	5	6	...	...	...	11
Buckhurst Hill	7	7	2	...	...	16
Burnham-on-Crouch	5	10	...	...	..	15
Canvey Island	27	5	...	...	1	33
Chelmsford B.	168	153	14	21	16	372
Chingford	51	43	2	11	33	140
Clacton-on-Sea	35	60	2	15	...	112
Colchester B.	...	225	3	17	...	245
Dagenham	104	20		2	2	128
Epping	179	47	..	21	1	248
Frinton-on-Sea	2	2	...	...	1	5
Grays	1,443	146	6	79	15	1689
Halstead	15	22	4	9	1	51
Harwich B.	18	58	2	1	1	80
Hornchurch	8	..	1	...	...	9
Ilford B.	44	438	22	3	19	526
Leyton B.	2,405	574	4	45	26	3054
Loughton	...	1	...	...	...	1
Maldon B.	55	41	3	4	2	105
Romford	378	134	2	38	6	558
Saffron Walden B.	23	14	...	10	...	47
Shoeburyness	39	22	...	24	...	85
Tilbury	58	34	..	...	..	92
Waltham Holy Cross	136	11	...	..	2	149
Walthamstow	163	875	22	1	24	1085
Walton-on-the-Naze	...	1	...	...	...	1
Wanstead	8	54	..	...	..	62
West Mersea	5	2	...	...	...	7
Witham	38	27	2	3	2	72
Wivenhoe	2	8	..	...	...	10
Woodford	76	27	2	2	4	111
Total	6067	3449	112	369	163	10160
Rural—						
Belchamp	7	3	2	...	...	12
Billericay	162	73	8	4	3	250
Braintree	239	710	6	4	5	964
Bumpstead	...	7	...	...	...	7
Chelmsford	111	27	1	...	50	189
Dunmow	14	9	1	...	2	26
Epping	93	12	1	1	...	107
Halstead	160	30	2	...	1	193
Lexden & Winstree	24	24	2	10	4	64
Maldon	224	23	7	12	2	268
Ongar	145	5	...	11	2	163
Orsett	104	17	2	5	2	130
Rochford	192	34	3	7	10	246
Romford	60	453	1	1	2	517
Saffron Walden	10	4	...	...	...	14
Stansted	8	1	1	...	...	10
Tendring	22	14	2	7	1	46
Totals—						
Rural	1,575	1,446	39	62	84	3206
Urban	6,067	3,449	112	369	163	10160
Adminis. County	7,642	4,895	151	431	247	13366

TABLE VI.

SHOWING PARTICULARS OF WORK CARRIED OUT BY LOCAL SANITARY AUTHORITIES UNDER THE HOUSING ACTS DURING THE YEAR 1925.

Sanitary Districts.	New Houses erected during 1925.			Unfit Dwelling Houses.				Houses rendered fit in consequence of informal action by Local Authority.	Action under Statutory Powers. Proceedings under Section 3 Housing Act, 1925.				Proceedings under Public Health Acts.			Proceedings under Sections 11, 14 & 15 of Housing Act, 1925.				
	Total.	With State assistance under Housing Acts, 1919, 1923 or 1924 by		Total No. inspected for Housing Defects.	No. inspected and recorded under Housing Regs. 1910, or Housing Consolidated Regs. 1925.	No found so dangerous or injurious to health as to be unfit for human habitation.	No. found not in all respects reasonably fit for human habitation		Houses in respect of which Notices were served requiring repairs.	No. Dwelling Houses rendered fit by		No. of Dwelling Houses Closing Orders became operative.	No. of Dwelling Houses Notices served requiring defects to be remedied.	No. Dwelling Houses in which defects were remedied by		No. representations made with view to making of Closing Orders.	No. of Dwelling Houses in respect of which Closing Orders were made.	No. of Houses Closing Orders determined Dwelling Houses being rendered fit.	No. of Houses Demolition Orders made.	No. of Houses demolished in pursuance of Demolition Orders.
		Local Authority.	Other Bodies or Persons.							Owners.	Local Authority in default of Owners.			Owners.	Local Authority in default of Owners.					
URBAN.																				
Barking	183	...	183	3134	1164	6	1759	1331	49	49	...	...	355	355	...	11	6	...	...	...
Braintree	61	...	60	216	84	6	145	117	..	...	...	...	50	32	...	5	4	...	...	...
Brentwood	38	13	7	52	26	9	21	6	...	...	...	...	34	34	...	...	...	...	...	...
Brightlingsea	11	...	8	65	65	2	2	16	2	...	...	9	197	173	...	2	7	..	6	6
Buckhurst Hill	54	...	37	150	38	..	20	80	...	...	...	2	...	..	...	...	...	...	...	...
Burnham-on-Crouch	17	...	16	105	275	...	...	16	...	...	...	...	...	...	...	...	...	...	...	...
Chelmsford B.	265	76	165	993	69	51	4	...	...	...	...	...	...	...	...	...	...	...	...	...
Chingford	347	...	...	...	152	...	75	63	...	...	...	3	599	543	...	55	51	...	...	...
Clacton-on-Sea	212	...	74	257	50	...	56	2	32	21	...	...	2	2	...	...	...	...	...	...
Colchester B.	158	46	102	1908	776	29	190	870	...	...	...	...	38	28	9	...	...	...	...	...
Epping	21	...	16	127	...	...	18	18	...	...	...	...	157	143	14	...	...	...	...	...
Frinton-on-Sea	18	...	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Grays	50	10	...	668	161	4	421	401	1	1	...	...	...	...	...	...	...	...	...	...
Halstead	30	8	22	337	337	...	337	199	46	46	...	...	421	401	...	...	...	...	...	...
Harwich B.	34	8	26	180	78	2	...	38	118	119	2	...	...	...	...	...	...	...	...	...
Ilford B.	1015	...	1015	749	260	...	592	489	...	...	...	...	51	54	...	2	2	...	...	...
Letton B.	209	44	59	4110	1317	...	2375	2082	114	14	14	...	3	2	...	...	...	...	...	...
Loughton	97	...	36	332	11	...	16	32	10	3	3	...	54	40	...	...	...	...	...	...
Maldon B.	26	16	8	417	27	2	25	...	11	11	...	...	...	...	...	...	...	...	...	...
Romford	168	..	91	488	...	...	234	221	25	13	...	...	...	...	...	...	...	...	...	...
Saffron Walden B.	7	...	7	147	20	...	104	99	..	...	...	...	40	40	...	2	2	2	...	...
Shoeburyness	53	36	1	74	...	...	74	...	...	...	...	...	27	26	...	...	...	...	...	...
Tilbury	354	351	3	427	134	9	283	201	35	30	...	5	5	104	...	...	...	...	...	...
Waltham Holy Cross	15	...	...	303	249	...	169	195	...	...	...	...	54	54	...	...	...	...	...	...
Walthamstow	179	64	55	5507	429	...	329	2223	87	67	12	...	26	24	...	...	...	...	...	...
Walton-on-the-Naze	60	20	34	25	15	10	5	10	...	...	...	...	29	20	...	...	...	1	5	5
Wanstead	207	...	...	250	47	...	47	120	...	...	...	...	12	3	9	...	...	2	...	...
Witham	67	50	...	66	...	20	16	16	...	...	...	...	...	...	...	...	...	...	...	...
Wivenhoe	5	4	1	48	171	...	1	48	...	...	...	20	5	5	...	...	...	...	...	...
Woodford	64	...	5	1609	341	...	251	244	...	...	...	...	16	...	...	...	...	...	...	...
													3	3	...	...	...	...	...	...
Urban Total	4016	746	2038	22744	6298	150	7499	9121	546	374	31	39	7	7	...	1	...	1	...	...
													2151	2059	32	78	72	6	11	13
RURAL.																				
Belchamp	...	...	...	218	24	10	15	39	21	18	...	...	29	24	...	...	...	...	...	...
Billericay	511	26	466	620	288	17	129	38	97	76	...	...	...	...	...	...	...	...	...	...
Braintree	105	46	49	243	205	19	224	228	8	8	...	3	49	228	...	9	5	...	...	...
Bumpstead	...	...	...	53	42	...	40	40	...	40	...	...	34	34	...	19	19	1	2	1
Chelmsford	146	16	72	225	162	6	22	160	...	...	...	...	166	6	...	...	...	...	...	...
Dunmow	14	...	9	42	14	6	31	33	4	2	...	...	4	4	...	6	5	5	...	...
Epping	60	...	38	260	26	2	157	163	24	14	...	...	35	33	...	2	2	...	...	...
Halstead	56	...	52	626	503	1	172	152	...	...	...	...	9	9	...	2	2	...	...	...
Lexden and Winstree	131	36	68	798	191	38	134	235	33	20	...	...	28	17	...	1	1	...	...	...
Maldon	75	8	43	209	28	4	26	29	...	...	...	...	45	39	...	20	17	8	...	...
Ongar	25	...	7	1607	1607	156	169	6	...	...	...	...	...	...	...	4	4	...	...	...
Orsett	492	188	...	92	...	9	80	80	...	...	...	2	84	84	...	...	...	...	...	...
Rochford	825	56	57	387	120	9	369	52	168	43	...	...	94	43	...	4	4	2	1	...
Romford	2959	...	2692	697	422	4	436	177	...	...	...	...	193	96	...	9	9	1	2	...
Saffron Walden	4	...	4	51	51	...	7	7	...	...	...	...	7	7	...	4	3	...	...	3
Stansted	17	...	...	323	209	1	4	8	1	1	...	...	...	...	...	...	...	...	...	...
Tendring	128	28	...	327	161	...	216	200	...	...	...	...	140	...	...	1	1	...	...	...
Rural Total	5648	404	3557	6778	3994	282	2225	1580	363	222	...	5	917	624	...	81	72	17	6	4
Boro' & Urban Total	4016	746	2038	22744	6298	150	7499	9121	546	374	31	39	2151	2059	32	78	72	6	11	13
Total for Administrative County	9664	1150	5595	29522	10292	432	9724	10701	909	596	31	44	3068	2683	32	159	144	23	17	17

EXAMINATION OF BACTERIOLOGICAL SPECIMENS.

Particulars of the specimens examined during the year 1926 by the County Bacteriologist, Dr. J. F. Beale, at 91, Queen Victoria Street, London, E.C.4. (Telephone : City 7116) are given in Table V. on page 18. The total number was 3366, an increase of 1,191 over the previous year.

HOUSING.

Table VI. sets out particulars of the work carried out by Local Sanitary Authorities under the Housing Act, 1925, during the year 1925. Unfortunately the information for 1926 is not available. Of the 9664 houses erected 2919 were built by private effort.

It will be noted that the Local Sanitary Authorities found it necessary to serve notices for the remedying of defects or the carrying out of repairs in 3068 cases.

In respect to dangerous and insanitary houses, Table VI. also shows the number of houses in each sanitary district which, during 1925, were deemed to be in a state so dangerous or injurious to health as to be unfit for human habitation. Under Section 25 of the Housing Act, 1925, Rural Councils are required to send to the County Council copies of any representations or Closing Orders made in respect to such property, but only 12 out of the 17 Rural Councils furnished such information, the figures for 1925 being as follows :—

Number of representations made in rural areas with a view to making Closing Orders (see Table VI.) ...	81
Number of houses in respect of which Rural Councils made Closing Orders (See Table VI.)	72
Number of Rural Councils sending copies of representations or Closing Orders to County Council ...	12
Number of houses regarding which copies of representations or Closing Orders were received by County Council	105

SEWAGE WORKS AND RIVER POLLUTION.

Table VIII. records the number of visits paid by the County Sanitary Inspector to sewage works and the number of samples obtained. Where continuous unsatisfactory samples were procured, improvements have been carried out or schemes to improve the quality of the effluents are under consideration.

The pollutions of the River Blackwater at Bocking, Coggeshall and Kelvedon referred to in detail on pages 48-52 in last year's Annual Report still continue. In view of the Southend Waterworks Act, 1924, under which the Southend Waterworks Company may exercise certain powers in respect to river pollution, it is imperative that the Braintree Rural District Council should be required to take the necessary steps to prevent further pollution of this river.

As regards the unsatisfactory effluent from the Braintree Urban Sewage Works, the Ministry of Health held an inquiry on 21st April, 1927, into an application from the Urban Council for sanction to borrow £4,600 for purposes of sewerage and sewage disposal.

In respect to the Colne Valley, Earls Colne with a population of 1,806 at the Census, 1921, continues to discharge crude sewage into the river at the bridge on the main road. As no definite steps had been taken by the Halstead Rural Council to stop this pollution in response to many representations from the County Council, legal proceedings were taken on 5th May, 1927, when an Order was obtained from the County Court, Colchester, requiring the Halstead Rural Council to abstain from committing an offence under the Rivers Pollution Prevention Act, 1876, but the order was suspended for six months with leave to apply for a further suspension if the District Council made some definite efforts to cease pollution during the six months.

METEOROLOGY.

The County Meteorological Station at Chelmsford has again kindly supplied the data set out in Table VII. below. April had the heaviest rainfall of 4.5 inches, whilst November had the highest number (22) of rainy days.

During the year 1926 rain fell on 151 days, producing a total rainfall of 24.4 inches.

TABLE VII.

OBSERVATIONS FROM THE COUNTY METEOROLOGICAL STATION AT CHELMSFORD.

1926.	Dry bulb readings.	Wet bulb readings.	Maximum readings.	Minimum readings.	Absolute maximum.	Date of absolute maximum.	Absolute minimum.	Date of absolute minimum.	Number of rainy days.	Rainfall in inches.
January	39.08	39.02	45.2	32.04	53	27th	6	17th	15	2.2
February	43.9	43.0	50.6	38.9	57	19th, 24th, 26th	26	14th	15	2.6
March	45.0	43.4	51.0	36.07	60	6th	25	31st	4	0.2
April	50.3	48.3	57.1	40.5	69	4th	31	11th, 13th	18	4.5
May	52.5	48.5	59.2	42.6	75	26th	30	9th	15	1.0
June	58.0	54.0	65.0	47.0	76	20th	38	25th	14	2.8
July	64.6	60.6	71.0	52.0	85	14th	46	1st, 2nd, 17th, 18th, 27th	12	2.1
August	64.7	60.2	72.4	51.7	81	31st	40	5th, 28th	9	0.8
September	61.7	58.6	69.8	50.3	87	19th	34	27th	8	0.9
October	48.5	46.5	55.2	38.5	71	6th	24	27th	13	2.6
November	44.9	43.9	50.1	38.1	56	11th, 12th, 15th	25	25th	22	4.3
December	39.1	38.1	56.6	33.8	51	31st	27	28th	6	0.4
TOTALS—										
Year 1926	...	...	...	...	...	...	...	...	151	24.4
,, 1925	...	...	...	...	...	...	..	...	149	23.5

TABLE VIII.

SHOWING SEWAGE WORKS, NUMBER OF VISITS AND NUMBER OF SAMPLES TAKEN DURING THE YEAR 1926.

River receiving Effluent.	Sewage Works.	Sanitary District.	No. of Visits.	Samples taken.		
				No. satisfactory.	No. unsatisfactory or on border line.	Total.
Blackwater	Braintree ...	Braintree U. ...	6	3	3	6
	Witham ..	Witham U. ...	3	4	1	5
Cam ...	Saffron Walden ...	Saffron Walden B.	4	1	3	4
Chelmer ...	Chelmsford ...	Chelmsford B. .	2	1	1	2
	Dunmow ...	Dunmow R. ...	2	1	1	2
	Felstead ...	Dunmow R. ...	2	1	1	2
	Great Waltham ...	Chelmsford R. ..	2	...	2	2
Colne ...	Halstead ...	Halstead U. ...	3	...	3	3
Crouch	Wickford ...	Billericay R. ...	3	1	4	5
Ingrebourne	Brook Street, South Weald	Billericay R. ...	4	3	4	7
	Upminster ..	Romford R. ...	1	1	...	1
	Brentwood ...	Brentwood U. ...	4	3	2	5
	Harold Wood .	Romford R. ...	1	2	...	2
	Great Warley ..	Romford R. ...	2	1	1	2
Roding ...	Buckhurst Hill ...	Buckhurst H. U.	4	...	3	3
	Chigwell ...	Epping R. ...	2	2	...	2
	Chigwell Row ...	Epping R. ...	3	1	...	1
	Loughton ...	Loughton U. ...	8	9	5	14
	Ongar	Ongar R. ...	4	...	3	3
	Wanstead ...	Wanstead U. ...	4	5	1	6
	Woodford ...	Woodford U. . .	4	7	1	8
	North Weald ...	Ongar R. ...	2	2	...	2
	Thornwood ...	Epping R. ...	8	...	6	6
	Theydon Bois ...	Epping R. ...	2	1	2	3
	Moreton ...	Ongar R. ...	2	...	2	2
Rom ...	Hornchurch ..	Romford R. ...	2	1	1	2
Wid ...	Billericay ...	Billericay R. ...	2	1	1	2
	Shenfield ...	Billericay R. ...	2	3	...	3
Miscellaneous	... ...	... ...	12	9	3	12
		Total	100	63	54	117
Samples from rivers, streams, etc.		... ...	10	9	10	19
Trade effluents	... ...	... ...	8	3	6	9
			118	75	70	145

MENTAL DEFICIENCY.

Arrangements have continued whereby Dr. T. P. Puddicombe, Chief Assistant County Medical Officer, acts as Mental Expert to the County Committee for the Care of Mentally Defectives as well as consultative Medical Officer for cases referred by the Justices.

One hundred and sixty-eight persons were medically examined and reported upon to the Committee during 1926 and classified as follows :—

	Males.	Females.	Total.
Feeble-minded	52	42	(*a*) 94
Imbeciles (Mongols 10) ...	24	20	44
Idiots (Mongols 2)	9	3	12
Not classified under the Act ...	9	9	(*b*) 18

(*a*) includes 12 and (*b*) 3 cases referred by the Police.

During the year 39 cases were placed in Institutions, 3 cases placed under guardianship and 80 under statutory supervision.

SALE OF FOOD AND DRUGS ACTS.

The supervision of the duties under these Acts is not undertaken by the County Medical Officer. Dr. Bernard J. Dyer, the County Analyst, receives samples direct from the Food and Drugs Inspectors, and he has kindly furnished the following particulars of the work done during the period 1st December, 1925 to 30th November 1926. Included in the Table set out below are samples submitted by the County Inspectors and six Local Sanitary Authorities direct.

Of the 3,367 samples submitted for analysis, 110 were found unsatisfactory, the percentage of adulteration being 3·3.

Milk. Out of 1,356 samples 87 were for one reason or another unsatisfactory. Of these, 28 contained added water, varying from as little as 4 per cent. up to as much as 44 per cent. Fifty-seven samples were deficient in fat, in quantities ranging from 5 per cent. to 43 per cent. of the minimum quantity proper to genuine milk. Two samples of milk were dyed with annatto, a proceeding which is illegal.

Butter. Only three of the samples of butter taken during the year were unsatisfactory, two of these consisting of mixtures of butter and margarine sold as "butter," while the third sample (an informal one) was unsatisfactory by reason of its containing more boric acid than is usually regarded as permissible, during the still existing period in which preservatives are allowed in butter.

Lard. Three samples of lard out of a total of 383 were unsatisfactory, one containing an excessive quantity of water (4½ per cent.) while two consisted of what is called lard compound.

Apples. During the year 32 samples of apples were taken, four of which were found unsatisfactory. This was due to arsenical contamination from washes used for insecticidal purposes. All of these cases occurred during last season. Such samples as were examined of this season's imported apples have been satisfactory as regards substantial freedom from arsenic.

The following is the usual Annual Summary for the year:—

ANNUAL SUMMARY.

December 1st, 1925, to November, 30th, 1926.

	Samples analysed.	Samples unsatisfactory.	Percentage of adulteration.
Northern District of the County	795	33	4·2
Southern District of the County ...	1045	23	2·2
Metropolitan District of the County ...	1335	32	2·4
Buckhurst Hill Urban District Council ...	1	—	11·5
Chingford Urban District Council ..	11	—	
Clacton Urban District Council	4	—	
Walthamstow Urban District Council ...	120	20	
Wanstead Urban District Council... ...	47	1	
Woodford Urban District Council ...	9	1	
	3367	110	3·3

In order to economise space the detailed list of samples analysed has been omitted from this report.

PUBLIC HEALTH MILK AND CREAM REGULATIONS, 1912-1917.

The County Analyst has also furnished the following information regarding action taken under these regulations during the period December 1st, 1925, to 30th November, 1926:—

Milk and Cream not sold as Preserved Cream.

	(*a*) Number of samples examined for the presence of a preservative.	(*b*) Number in which preservatives was reported to be present and percentage of preservative found in each sample.
Milk	1356	0
Cream	27	8

E. 13 contained 0·35 per cent. boric acid (informal).
A. 180 ,, 0·35 ,, ,, ,,
X. 181 ,, 0·25 ,, ,, ,,
X. 853 ,, 0·10 ,, ,, vendor cautioned.
X. 858 ,, 0·20 ,, ,, (informal).
X. 866 ,, 0·30 ,, ,, vendor fined £15.
X. 888 ,, 0·35 ,, ,, vendor cautioned.
Woodford ,, 0·15 ,, ,, (informal).

CREAM sold as Preserved Cream.

Correct statements made	...	...	20
Statements incorrect	...	...	0
			20

DETERMINATION MADE OF MILK FAT IN CREAM sold as Preserved Cream.

(1)	Above 35 per cent.	...	...	20
(2)	Below 35 „	..	.	0
				20

MILK AND DAIRIES ORDER, 1926.

The Milk and Dairies Order, 1926, the majority of the provisions of which came into operation on the 1st October, 1926, revokes the Dairies, Cowsheds and Milk Shops Orders of 1885, 1886 and 1899, so far as they relate to England and Wales, and all regulations made thereunder by Local Authorities. The main provisions of those Orders and Regulations are replaced in the present Order by provisions similar in general purpose, but modified in accordance with the development of modern hygienic knowledge so as to lay greater stress on cleanliness in all operations connected with the production and handling of milk (including the care of the cow) than upon the structure of buildings.

Every Sanitary Authority is required to keep registers of all persons carrying on in their district the trade of cowkeeper or dairyman, and of all farms and other premises within their district which are used as dairies. No person may carry on the trade of cowkeeper or dairyman or use any premises as a dairy unless he and any such premises are registered.

Sanitary Authorities are also required to inform the County Council of the particulars of registration of cowkeepers and their premises, and from time to time to notify the Council of all alterations made in the registers.

The Ministry of Health states that the most important of the new provisions of the Order are those relating to the health and inspection of cattle and to the handling, conveyance and distribution of milk. The former provisions are contained in Part IV. of the Order and are supplementary to Sections 3, 4 and 5 of the Milk and Dairies (Consolidation) Act, 1915, which involve the inspection of cattle, and will be administered by the Authorities upon whom is laid the duty of enforcing those Sections, *i.e.* Councils of Counties and County Boroughs. The other Sections of the Order are administered by the Local Sanitary Authorities.

After considering various reports from the Clerk of the County Council and the County Medical Officer upon the procedure to be adopted for carrying out the provisions of the Milk and Dairies Order, 1926, the Public Health and Housing Committee recommended, and the County Council approved, the following arrangements :—

(1) That samples of milk be taken from time to time from dairymen and milk producers in different parts of the County, and that such samples be examined microscopically for the presence of tubercle bacilli.

(2) That as an experiment biological examinations be made in those cases in which the County Medical Officer of Health considers it necessary, the number of such examinations not to exceed 20 during a period of 12 months.

(3) That, subject to the concurrence of the Parliamentary and Metropolitan District Committees, samples be taken by the Inspectors of Weights and Measures when taking samples for the purposes of analysis under the Sale of Food and Drugs Acts.

(4) That the Veterinary Inspectors employed by the County Council under the Diseases of Animals Acts be appointed Veterinary Inspectors for the purposes of the Milk and Dairies (Consolidation) Act, 1915, and the Milk and Dairies Order, 1926, such Officers to act in all cases only on the written instructions of the Clerk of the Council or the County Medical Officer of Health.

The Public Health and Housing Committee have under consideration the question of undertaking a general inspection of dairy herds in two rural districts, and from the experience gained in those areas they will judge whether the results justify the expense of an extension of the examination to the whole County.

According to a return supplied by the Ministry of Agriculture and Fisheries for the year 1925, there were in the Administrative County of Essex the following cattle :—

Cows and heifers in milk	35,985
Cows in calf not in milk	5,588
Heifers in calf	8,310
Total ...	49,883

GRADE "A" MILK.

The following licences have been granted by the County Council since the Milk (Special Designations) Order, 1923, came into force :—

8	during the	year	1923
11	,,	,,	1924
27	,,	,,	1925
35	,,	,,	1926

During the year the County Sanitary Inspector paid 212 visits to farms which were licensed or which had applied for licences to produce and sell Grade "A" milk,

when 193 samples were taken and submitted to the bacteria test. In addition, 98 samples were submitted to microscopical examination when four were found to contain bacilli indistinguishable microscopically from the tubercle bacilli.

Under the auspices of the Essex Agricultural Society a further County Clean Milk Competition was held and the County Sanitary Inspector again acted as one of the judges.

Tuberculosis Order, 1925 The Clerk of the County Council has kindly furnished the following information on the working of this Order by his Department since 1st September, 1925 :—

	1925. (part).	1926.
No. of animals examined by veterinary surgeons ...	6,320	20,608
No. of animals slaughtered under the Order	230	676
No. of such animals found on *post mortem* to be—		
(*a*) Not tuberculous ...	1	2
(*b*) Tuberculous but not advanced ...	81	318
(*c*) In an advanced stage of tuberculosis ...	148	356
Total amount of compensation paid by County Council ...	£1,331 3s.	£4,017 6s. 6d.
Total receipts from sale of carcases	£283 11s.	£701 5s. 6d.

WATER SUPPLIES.

In the report for 1925 reference was made to the engagement by the County Council of Mr. J. Mackworth Wood, M.I.C.E., late Engineer in charge of the Metropolitan Water Board's Works in the Lea Valley, to make a survey of the water resources and requirements of the County and to prepare a report covering certain prescribed particulars. This report was issued during 1926 and a copy was furnished to each of the Sanitary Authorities in the Administrative County outside the area of the Metropolitan Water Board with a request that they should take the report into consideration, with a view to holding a conference on the matter.

After considering the report, it appeared to the Parliamentary Committee that the present policy of the County Council should be to see that chiefly such water supplies as exist within the County should not be exploited for the benefit of one particular area only, to the detriment of other areas in need of more water, or so situated that if a certain supply were appropriated by others they would be deprived of what would be their natural source. In other words, the County Council should be concerned

to see that the existing supplies should be distributed equitably, and as so little data exists as to the flow of the rivers of the County, the County Council decided on 6th July, 1926, that the Parliamentary Committee be authorised to undertake the gauging of the Rivers Cam, Colne and Stour and possibly the Roding, but that for the present such gauging be limited to the River Stour.

As stated in last year's Annual Report, it is obvious that a very considerable amount of additional water will be required in the Administrative County during the next few decades, and the only remaining practical source of future supplies for Essex is the River Stour. The County Council are taking the necessary steps to safeguard the general interests of the County.

PUBLIC HEALTH (SMOKE ABATEMENT) ACT, 1926.

The principal provisions of this Act, which comes into operation on 1st July, 1927, deal with the following matters :—

(*a*) Power to take proceedings in respect of a nuisance from smoke which is not black emitted from any chimney, except the chimney of a private dwelling house.

(*b*) Extension of " smoke " to include soot, ash, grit and gritty particles.

(*c*) Increase of penalties.

(*d*) Power to make bye-laws prescribing standards as to the emission of smoke.

(*e*) Power to make bye-laws respecting cooking and heating arrangements in new buildings other than private dwelling houses.

(*f*) Power to the Minister of Health to authorise the County Council to carry out duties with regard to smoke abatement on default of the Sanitary Authority.

(*g*) Power to the Minister to extend the operation of the Alkali, etc., Works Regulation Act, 1906.

(*h*) Act does not apply to, or affect, enactments in force regarding smoke nuisance and smoke consumption in any ship habitually used as a sea-going ship.

The Local Sanitary Authorities are responsible for the administration of this Act, which gives them useful additional powers, and it will be observed from (*f*) above that in default the County Council may be authorised by the Minister of Health to carry out the duties.

In respect to (*g*), it is hoped that the Minister of Health will take early advantage of these powers in order that his inspectors under the Alkali Act may be in a position to supervise oil refineries, some of which in the southern portion of the Orsett Rural District gave rise to offensive smells in 1922 and 1923.

PUBLIC HEALTH PROPAGANDA.

A Propaganda Sub-Committee was appointed by the Public Health and Housing Committee to organise the work of health propaganda with leave to confer with the Essex Education Committee and the Essex Insurance Committee and such other organizations as may be deemed advisable and to submit a scheme for the consideration of the Public Health and Housing Committee.

On 5th October, 1926, the County Council approved of the following scheme for Health Propaganda :—

SCHEME FOR HEALTH PROPAGANDA.

(1) *Powers.* Section 67 of the Public Health Act, 1925, reads :—

(i) Any Local Authority or County Council may arrange for the publication within their area of information on questions relating to health or disease, and for the delivery of lectures and the display of pictures in which such questions are dealt with, and may defray the whole or a portion of expenses incurred for any of the purposes of this Section.

(ii) The Minister of Health may, for the purposes of this Section, make rules prescribing restrictions or conditions subject to which the powers conferred by this Section may be exercised.

(2) *Principles of Co-operation.* To avoid overlapping, the County Council has adopted the following principles for a Scheme of Health Propaganda in the County of Essex to secure the co-operation and assistance of Local Sanitary Authorities and other organizations :—

(*a*) That propaganda campaigns, supported by the County Council, including those of voluntary organizations, shall be undertaken through and in co-operation with Local Sanitary Authorities.

(*b*) That the members of the staff of the County Public Health Department shall be available to give lectures by arrangement with the County Medical Officer of Health.

(*c*) That propaganda campaigns shall deal with general health principles, rather than specific health subjects, based on the headings shown in (3) below, and preferably include practical Health Exhibitions.

(*d*) That financial assistance from the County Council is restricted to the provisions made in the estimates for each current financial year.

(*e*) That the County Council, through the organization of the Public Health and Housing Committee, is prepared to advise upon suitable lectures, films, lantern slides, exhibits and schemes for local campaigns. To this end, all organizations interested in health matters are cordially invited to co-operate in the County Council's effort to establish and keep up-to-date a central bureau of information on health subjects.

(3) *Subjects for Lectures.* The County Council are of opinion that much useful work can be accomplished under the following headings :—

Food, including Meat and Milk.

General Sanitation.

Housing.

Insect Life and Health.

Industrial Hygiene.

Personal Hygiene and Health, including Care of Teeth, Exercise, Rest, Sleep, Fresh Air, Cancer, Common Ailments, Heart Disease, Infectious Diseases, Orthopædics, Rheumatism, Racial Health, Tuberculosis, Venereal Diseases.

School Medical Service.

Maternity and Child Welfare.

(4) *Assistance from County Council.* The County Council is prepared to assist Local Sanitary Authorities in promoting regular health campaigns in their areas and in the following directions :—

(*a*) Services of the County Organization.

(*b*) Suitable lecturers, films, exhibitions, general equipment, lantern slides diagrams, etc.

(*c*) The County Council will only give financial assistance in special circumstances.

During the year, the County Medical, Nursing, Inspectorial and Teaching Staffs continued the giving of health talks in Schools, Dispensaries and Child Welfare Centres and at Women's Institutes, Brotherhoods, etc., and Voluntary Organizations provided lecturers and courses.

COMBINED MEDICAL SERVICE.

In the Report for the year 1925, a review of the Combined Medical Service Scheme in Essex, with the principal features, the observations of the officers concerned and particulars of schemes in operation were given.

Table IX. shows the schemes in operation at the end of the year 1926, which with the minor alterations shown in areas 1 and 11, remained the same as for 1925.

The following amendments and developments were, however, pending, and at the time of writing are being put into operation : –

(*a*) Area No. 8 (Braintree, Dunmow and Witham).

Since Dr. P. J. Gaffikin commenced duty in October, 1923, experience has proved that even with the assistance given by Dr. M. D. Rankine in the School and Child Welfare work, the requirements of the Braintree and Dunmow Unions have not been met.

A conference between representatives of the County Council and the Local Authorities concerned approved of Dr. Gaffikin being relieved of his duties as Medical Superintendent of Black Notley Sanatorium, a re-apportionment being made of the time given to County Council work and of a reduction in the amount payable by the latter towards Dr. Gaffikin's salary and travelling expenses. The new arrangements will come into force on 1st April, 1927.

(*b*) New Appointment.

The Witham Urban District Council, whose part-time Medical Officer of Health resigned in September, 1926, agreed to the new Assistant County Medical Officer appointed for Black Notley and Witham, etc., acting as their Medical Officer of Health, in consideration of which they would contribute £50 per annum of his salary. The post is being advertised, and it is hoped that the new officer will commence duty in May, 1927. A re-arrangement of the duties of Dr. W. H. Alderton, Dr. W. Burton Wood and Dr. Mary D. Rankine will then be possible.

(*c*) Dagenham.

This area, with its ever growing population as a result of the development of the L.C.C. Housing Estate, became an Urban District on the 1st April, 1926. As a result of conferences between the representatives of the new District Council and of the County Council, an officer has been appointed who will act as Medical Officer of Health for the District Council and as Assistant County Medical Officer for the County Council, performing the duties for the latter of School Medical Inspector.. The County Council pay a salary of £250 per annum and the Dagenham Council £550 per annum. The latter provide necessary office accommodation and clerical assistance and pay necessary travelling expenses, and the County Council pay a contribution of £50 per annum to the Urban District Council towards these expenditures. The arrangements are to remain in operation, in the first instance, for a period of 12 months, and thereafter are terminable by six months' notice on either side.

Dr. E. W. C. Thomas was appointed and commenced duty 4th April, 1927.

(*d*) General.

As stated in the last report, Dr. J. Pearse, of the Ministry of Health, made an inquiry early in 1926 into the various aspects of the scheme, and by the courtesy of the Ministry of Health, some extracts from his report are appended.

Area No.	Sanitary District.	Estimated Population, 1926.	Acreage.	Date Scheme commenced.	Name of Officer.	Duties.†
1	Lexden & Winstree R. *a*	18115	69485	1st April, 1920	W. H. Alderton*	M.O.H. and Assist. C.M.O.
	West Mersea U.	1696				" "
	Wivenhoe U.	2270	1564			Assistant C.M.O. only
		22081	71049			
2	Clacton-on-Sea U. *a*	13540	4069	1st June, 1920	W. A. Milne	M.O.H. and Assist. C.M.O.
	Brightlingsea U.	4215	2867			Assist. C.M.O. only
	Walton-on-Naze U.	2746	2046			" "
	Frinton-on-Sea U.	2110	422			" "
		22611	9404			
3	Tendring R.	22660	73131	11th Sept., 1920	J. Ramsbottom	M.O.H. and Assist. C.M.O.
	Harwich Borough *a*, *b*	12290	1541			Assist. C.M.O. only (T.O.)
		34950	74672			
4	Grays U. *a*	17910	1359	1st August, 1922	W. T. G. Boul	M.O.H. and Assist. C.M.O.
	Tilbury U. *a*	14740	1855			" "
	Orsett R. *a*	24590	38084			Assist. C.M.O. only
		57240	41298			
5	Chelmsford Borough *a*, *b*	22800	3112	1st. Jan., 1923	R. H. Vercoe	M.O.H.
	Chelmsford R. *a*	26690	83045			S.M.I. only
		49490	86157			
6	Saffron Walden Borough	5448	7502	1st Jan., 1923	S. R. Richardson	M.O.H. and Assist. C.M.O.
	Saffron Walden R.	9736	59975			" "
	Stansted R.	6911	22954			Assist. C.M.O. only
		22095				
			90431			
7	Halstead U.	5821	647	1st Sept., 1923	J. S. Ranson	M.O.H. and Assist. C.M.O.
	Halstead R.	9499	38712			" "
	Belchamp R.	4115	26500			" "
	Bumpstead R.	2279	11874			Assist. C.M.O. only
		21714	77733			
8	Braintree U.	7149	2224	1st Oct., 1923	P. J. Gaffikin	M.O.H. and Assist. C.M.O.
	Braintree R.	19180	62348			" "
	Dunmow R.	14800	73503			" "
	Witham U.	3980	3713			Assist. C.M.O. only
		45109	141788			
9	Barking U. *a*, *b*	38920	3805	1st April, 1920	K. Simpson	M.O.H. and Assist. C.M.O.
10	Colchester Borough *a*, *b*	49480	11333	13th July, 1921	W. F. Corfield	M.O.H. and T.O.
11	Shoeburyness U.	5802	1036	1st Feb., 1925	N. S. R. Lorraine	M.O.H. and Assist. C.M.O.
	Rochford R.‡	28591	55003			Assist. C.M.O. only
		34393	56039			
12	Chingford U.	11500	2808	19th Oct., 1925	M. Barker	M.O.H. and Assist. C.M.O.
	Woodford U. *a*	21820	2161			T.O. only
	Wanstead U. *a*	16510	1679			"
		49830	6648			

* Dr. Alderton also acts as Assist. C.M.O. in Maldon Union and is paid an additional amount of £50 per annum for this work. In April, 1926, West Mersea, situated in the Lexden & Winstree District became an Urban Authority and appointed Dr. Alderton as M.O.H. at a salary of £50 per annum.

‡ Canvey Island in the Rochford District was made an Urban District as and from April, 1926. A Part-time M.O.H. was appointed.

† M.O.H. : Local Medical Officer of Health. Assist. C.M.O. : Assistant County Medical Officer. T.O. : Tuberculosis Officer. S.M.I. : School Medical Inspector. *a* Autonomous Child Welfare Areas. *b* Autonomous Education Areas.

Dr. J. PEARSE'S REPORT ON COMBINED MEDICAL SERVICES IN THE COUNTY OF ESSEX.

The system of a Combined Medical Service was first instituted in one area of the County of Essex in 1920, and has been extended until it now includes twelve areas. The system may be briefly described as involving the appointment by mutual arrangement between the County Council and Local Authorities of one officer who acts as Medical Officer of Health to the Local Authority or Authorities concerned and performs duties for the County Council within the sanitary districts. The usual method of application is that the officer acting as Medical Officer of Health acts also in the capacity of School Medical Inspector, Tuberculosis Officer, Maternity and Child Welfare Officer. The system has been mainly applied in smaller urban and in rural districts, but has been extended in a modified form to larger centres, Colchester, Chelmsford and Barking, where the whole-time Medical Officer of Health to the Local Authority acts also for the County Council—in Colchester and Barking as Tuberculosis Officer, in Chelmsford as School Medical Inspector to a rural district. The problems raised in these larger centres are different from those in the other districts, and the observations in this report apply mainly to the latter.

There were previously in these areas both part-time and whole-time appointments. Thus there were the following Combined Medical Officer of Health districts:—Braintree Urban District and Rural District, Dunmow Rural District, Halstead Urban District and Rural District, Belchamp Rural District: Saffron Walden Borough and Rural District, with parts of Cambridgeshire: Clacton Urban District, Tendring Rural District, Lexden Rural District.

In the first of these combinations there was an interregnum between the decease of the last whole-time incumbent and the introduction of the present system, during which period part-time officers were employed.

There is within the County one combination for Medical Officer of Health purposes only. This comprises the rural districts of Chelmsford, Maldon and Rochford, with a population of 63,958 and an area of 220,390 acres.

I was instructed to make investigation into the operation of these combined services. As means to such investigation I have interviewed the County Medical Officer of Health; I have visited each district and sought the opinion and experience of members of individual Local Authorities; I have freely discussed matters with the Medical Officers concerned, have seen Sanitary Inspectors, examined the evidence of activity in Public Health departments, and in each area made a brief inspection in order to make myself cognisant of conditions and requirements.

From enquiries made, from opinions expressed, and from personal observations, the following comments and criticisms are submitted:—

(1) *General Impressions.* One's general impression of the operation of the scheme from the Medical Officer of Health point of view is favourable.

There are certain factors, not necessarily inherent in the scheme, which must exercise influence under any system, *e.g.*, the zeal or apathy of Local Authorities concerned, the type and sufficiency of Sanitary Inspector Staff, and personality of individual medical officers. There are other factors which are inherent in the scheme, *e.g.*, the area and population allotted for Medical Officer of Health duties and the amount of time required for County Council functions: these points will require further consideration.

The attitude of the Local Authorities concerned has, on the whole, been distinctly favourable, and this has been especially noticeable where the Authority is zealous in public health activity.

The view of the officers holding these combined posts has also, on the whole, been favourable to the system. Certain criticisms and suggestions have been made which will be incorporated in later observations.

(2) *Advantages of the System.* There are certain obvious advantages which need not be stressed in detail, *e.g.*, the availability of a specially trained officer, the avoidance of overlapping by a multiplicity of officials, and also the consequent lessening of travelling expenses and saving of time. Other less obvious but important advantages emerge :—

(*a*) The co-ordination of various duties of which the following have been given as specific examples :—

Children can be followed from Welfare Centres to school life.

Tuberculosis contacts of school age can be marked as special cases and kept under observation.

The School Medical Inspector being also Medical Officer of Health has cognisance of housing and other environmental conditions.

The Medical Officer of Health, in his capacity as School Medical Inspector, can gain indication of local conditions from his school examinations and from information gleaned from parents ; in one instance this led to a house to house inspection of a village and a consequent housing scheme.

Verminous children can be followed up forthwith and home conditions dealt with.

There is no distinction between Medical Officer of Health and School Medical Inspector on the occasion of epidemics in schools ; also more immediate information is obtained by the direct receipt from school teachers of reports on the presence of infectious disease.

Environmental conditions affecting schools can be more readily dealt with, *e.g.*, nuisances in the vicinity.

(*b*) There being one officer residing in the district and responsible for all duties, he has an extended opportunity for gaining knowledge of the community and of conditions, he becomes known as the responsible officer, is more readily consulted, and so has the opportunity of wider influence.

(*c*) Members of a Local Authority who are also County Councillors are in contact with one officer in the district instead of several, and, as it was put to me, are able to feel "that everything is under one hat."

(*d*) Officers concerned have a wider range of duties, and consequently a more comprehensive interest than if they were continuously engaged in special limited subordinate duties under the County Council. This was frequently expressed, and it was clear that these appointments have been welcomed as an avenue of escape from what was more than once described as a "blind alley" or "a dead end."

(3) *Dual Control.* No evidence has been adduced of practical difficulty in the discharge of Medical Officer of Health functions arising from the fact that the officer is serving two distinct authorities. This is a point on which specific information was sought in each case. Such difficulty had been anticipated by several of the local authorities concerned, but in no instance was it found that this has materialised. There is no doubt a feeling that the County Council duties receive first consideration because these are definite and scheduled, and because the officer is largely dependent upon the County Medical Officer of Health for his chances of promotion.

No definite agreement exists between local authorities and the County Council as to apportionment of time, but there is a general understanding that this shall approximate to the relative apportionment of salary.

The appointment as Medical Officer of Health is subject to the Public Health Officers Act, but that under the County Council is terminable under notice. The officers have thus no real security of tenure. This is a potential difficulty which perhaps requires safeguarding. The County Council appears in some cases to have increased duties over those indicated when the appointment was first made.

A practical difficulty has emerged on a question of salary in that a local authority may have desired that an officer's salary should be increased, but the County Council has declined to participate. The local authority does not consider itself justified in alone increasing salary, as it has no increased lien on the officer's time.

(4) *Views of Local Authorities.* The following are extracts from opinions expressed :—

> "Could not be more satisfied than with present arrangement."
>
> "Complaints were formerly frequent, but are now non-existent."
>
> "System has worked quite satisfactorily and is an improvement on former arrangements."
>
> "Would have no hesitation in renewing the arrangement. County Council duties were probably regarded as having first claim."
>
> "It was felt that the Medical Officer of Health was primarily a County Council official."
>
> "It was considered that this was the best arrangement that the Council had had."
>
> "Very satisfied and better served than formerly."
>
> "In the dark as to how much time and attention the district receives."

(5) *The Performance of Medical Officer of Health Duties.* In assessing this item, it has been necessary to bear in mind that one is dealing in the main with small urban or with rural districts in which throughout the country the average standard is not of high level. In some of the districts visited a definitely high standard is attained; in others it is good; in certain it is indifferent. In some districts there is evidence that under the present system there has been a tightening up of sanitary administration and a stimulation of local interest. Generally speaking, where there is a compact area and County Council duties are not excessive, the work is well

done in all details; in wider districts and where an officer may have to serve several authorities, the arrangements at present in vogue do not allow a sufficiency of time for Medical Officer of Health functions. This statement means that, while the officer is able to direct his attention to any emergency or to any point on which the Council asks his advice, or which is referred to him by the Sanitary Inspector, he may not be able to survey his district or sufficiently make independent representations to his Authority. Similarly, the important point of frequency of contact with Sanitary Inspectors varies with the extent of the district and the number of Authorities served. Where the work is indifferent, it is due not to the system but to the size of the area, the number of Authorities involved, the multiplicity of other duties, the personality of individuals with variation of outlook, energy and independence.

Enquiries made from officers as to the time allotted to various duties show that the time estimated to remain available for Medical Officer of Health duties varies from a half to a small fraction.

This leads to a consideration of—

(6) *Variation in Duties and Area.* That there is considerable variation in the requirements of the several districts is indicated by the sub-joined Table which shows the population and acreage for Medical Officer of Health and for school duties in areas where the duties approximate in type:—

	Medical Officer of Health.		Schools.	
District.	Population.	Acres.	Scholars.	Acres.
1	19475	69485	4433	71049
2	17049	4069	2310	9404
3	21720	73131	3400	73131
†4	26946	3214	8840	41298
6	15967	67477	3075	90431
††7	19874	65859	2830	77733
†††8	35113	138075	6410	141788
11	6413	1036	4950	56039

† Assistance given, approximately half-time.
†† Also in charge sanatorium.
††† Duties re-arranged later.

This variation is inherent in any scheme which must be adjusted to present boundaries of sanitary districts, and especially when such has to be improvised as vacancies arise in Medical Officer of Health appointments and as local authorities can be persuaded to co-operate. The variation would be minimised under any general policy.

There is also a marked variation in the payments made by individual local authorities for Medical Officer of Health purposes. The range extends in urban districts from £4 4s. per 1,000 population to £21 1s., and in rural districts from £5 4s. to £16 1s.

This brings one to a consideration of—

(7) *The Unit for Satisfactory Work.* This is difficult to assess with any degree of accuracy. Due allowance has to be made for defined duties as school examinations, attendance at Welfare Centres or tuberculosis dispensaries, but these are a different problem in country districts compared

with urban Centres both in respect to the amount of work involved and of the time absorbed in travelling. An officer's time is usually reckoned in "sessions," but this itself is a vague term. Few of the officers I have seen can give an exact estimate of the relative apportionment of their time; they can only approximate to this, and state whether they consider that they have a sufficiency in which to compass their duties. Further, one has not been in a position to judge in each area whether the various requirements in relation to the school service, maternity and child welfare and tuberculosis are being adequately met, but only to envisage the general administrative problem and the specific performance of Medical Officer of Health duties.

The point can perhaps best be approached by taking certain concrete examples.

Chelmsford Borough has a population of 20,761; here all public health functions are carried out with the exception of tuberculosis; in addition, the Medical Officer of Health acts as School Medical Inspector to the adjacent rural district with an area of 83,045 acres, a population of 24,618 and 3,480 scholars; the total number of scholars is 6,280. There appears to be no difficulty in compassing the requisite work. This district comprises a considerable rural area with a large urban centre.

District No. 1 is rural with no large centre of population.

The Medical Officer of Health's population is 19,475 in 69,485 acres, there is an extended area for school inspection and tuberculosis, giving a total population of 30,983 and a total number of scholars 4,433. There is a Council keen on public health, and the work appears to be efficiently done without any complaint of lack of time. This Council is autonomous for Maternity and Child Welfare, and this work is exceptionally developed for a rural district.

District No. 8 comprises for all purposes (except Maternity and Child Welfare), one urban centre and two rural districts and a small urban centre for County Council purposes—population 44,832 in 141,788 acres, scholars 6,410. Medical Officer also in charge Sanatorium.

This work is beyond the compass of any individual officer. Detailed attention cannot be given to the Medical Officer of Health work in rural districts.†

†The duties of this area have been re-arranged since this report was written.

If the estimate of the above districts is correct, it would appear that in an urban centre of 20,000 the various public health requirements can be carried out and leave time for additional outside duties; that in a rural district a population of 30,000 in 70,000 acres can be catered for without difficulty; that a population of 40,000 in a large area constitutes an undue demand. An approximately just standard is probably to be found between the two last instances. Dr. Bullough estimates a satisfactory unit to be a population of 30,000 in 60,000 to 70,000 acres, and I am inclined to agree with this view.

(8) *Further prospects from present Posts.* In an earlier paragraph it was indicated that an advantage of the scheme is that the posts constitute an advance upon single occupation employment under the County Council. This is so as regards diversity of interest and also as regards salary, the usual remuneration for the posts being £700 per annum, plus travelling expenses. The scheme, therefore, offers a definite attraction in the earlier stage of a public health career. But there is some doubt as to further prospects. Promotion in public health service is at present, in the main, by way of the boroughs, but experience gained in these districts, which are mainly rural in type, is not such as would carry weight in a borough

appointment. It appears that since the inception of the scheme, only two officers have left, one for private practice, and one on advancement within the County. The inference may be that the occupants of the posts are well satisfied to remain where they are, but another inference may be that they have failed in selection for other posts. By some the position is now regarded, as it was put to me, "as an end job." Thus, though the earlier advantages of the posts are obvious, the later avenues of promotion appear doubtful, at any rate, from the more rural areas, and this merits consideration as an influence affecting the public health service. A permanent income of £700, or even one rising, as has been suggested, to £800, will not offer attractions proportionate to the rewards of private practice.

(9) *Title of Posts.* The previous paragraph has indicated a potential limitation in these posts. It was further indicated to me that there is disadvantage in the designation *Assistant* County Medical Officer. A reason given was that so long as an officer is styled "assistant," the County Council will always grudge any generosity in remuneration. It was also urged that as an officer advances in years, he naturally desires an independent position. Such a wish is by no means always possible of attainment, and much depends on how supervision is exercised. But it is desirable that individual responsibility should be increased as much as possible.

There is certainly some apprehension, especially in larger and more progressive Centres, lest an extension of association with the County Council should sap local independence and responsibility.

(10) *Comparison with Combined Medical Officer of Health Appointments.* This scheme offers certain definite advantages over the combination of areas for Medical Officer of Health purposes only, especially when these are, as is often the case, of unduly wide extent. The work is more varied; the district being more limited the officer has better opportunity of making himself cognisant of local conditions; the authorities being fewer, the officer is better known to Councillors and more able to make his influence felt; he is also in closer contact with sanitary inspectors.

But, on the other hand, the Combined Medical Officer of Health posts possess very definite attractions to the individual in that the position is independent and the remuneration usually on a much higher standard. The standard salary of posts under the Essex scheme is £700, whereas salaries of £1,000 to £1,200 may be paid for combined Medical Officer of Health appointments.

(11) *Co-ordination of County and Local Interest.* Several of the officers have spoken to me of the divorce between local interest and County Council functions. Thus, an Authority may have no cognisance of Tuberculosis beyond the number of notifications. And it has been said that when matters arising, *e.g.*, in connection with the school service have been mentioned, Councillors have remarked, "we won't bother about that; its the County's job."

The Medical Officer of Health for one district stated that it would be of great assistance to him if there were available in his area a Committee which would co-ordinate County Council activity with local interest. Such Committees exist to some extent in Essex, but their extension of activity towards public health appears to vary. In another area there was found a very active Welfare Sub-Committee of the Education Committee which follows up the Medical Inspection of School Children and co-operates with Child Welfare and Tuberculosis Schemes. The Medical Officer stated that this Sub-Committee was invaluable and so efficacious that every child received due attention, so much so that re-inspection appeared almost unnecessary.

(12) *Some County Council Aspects.* The reason given for the initiation of this scheme is primarily the avoidance of overlapping and the simplification of administration. It is also said that a better type of officer is thus obtained. Thus Dr. Bullough has stated "I shall assume that we all agree that there is general overlapping amongst authorities and their officers in health matters, with resulting friction and lack of efficiency, particularly in rural areas. . . . It is in the rural parts of a County that overlapping, waste of time and trouble are most seriously felt."*

* Address to Medical Officers of Health Society, Birmingham, 3rd December, 1925.

There is no doubt that this simplification of administration represents a very real advantage both to the authorities concerned and the public generally. On this ground alone the system merits further consideration. It should also conduce to economy in staffing if only by the reduction in the time and expense which is involved in several officers travelling the same area on different functions. This also is an advantage. But in any systematic development of the principle of these appointments, it will be necessary to be assured that County Council obligations do not make an undue demand on an officer's time to the exclusion of sufficient opportunity for attention to the requirements of local authorities.

Conclusions. (1) The system has definite advantages; mainly—

(*a*) It conduces to simplification and probably economy of organisation.

(*b*) It provides means whereby smaller local authorities may obtain the public health services of qualified officers.

(*c*) It links up departments of preventive medicine which are otherwise separate.

(*d*) It provides an outlet from single avenue public health employment, thereby widening the outlook of officers concerned.

(2) There is considerable variation in the time available for and the attention devoted to the public health administration of local authorities. It is necessary to ensure that the scheduled duties under the County Council allow a sufficient margin of time for these local obligations.

(3) This variation is inevitable in any scheme which has to be adapted to the exigency of occasional vacancies in Medical Officer of Health appointments.

The difficulties would be lessened if the scheme were part of a settled policy instead of an occasional *ad hoc* creation.

(4) There might be advantage in arranging larger areas worked by a senior medical officer with assistants. This would obviate adapting existing areas to the capacity of one individual; it might be possible to adapt the sanitary inspectorate to such an organisation and to provide clerical assistance which would relieve medical officers of a large amount of routine which absorbs much of their time and takes them from essential duties. To such areas there should be delegated as much responsibility as possible. There would be, in addition, the definite advantage that junior officers might thereby be trained in the variety of duties, and that senior posts of increased responsibility and emolument would be available which would increase opportunity in the public health service.

(Signed) JAMES PEARSE. C.B.E., M.D.,
Medical Inspector,
Ministry of Health.

November, 1926.

COMBINED TREATMENT CENTRES.

The Combined Treatment Centres under the County Council at the end of 1926 were as follows. This list does not include Clinics solely used as School Clinics or Tuberculosis Dispensaries, or as Child Welfare Centres, but those used for more than one of these three services by the County Council:—

Centre.	Purpose for County Council.	Date opened.
Stansted—Central Hall ...	School Clinic and Child Welfare Centre	April, 1919.
*Clacton-on-Sea—Skelmersdale Road	,, ,, Tuberculosis Dispensary	January, 1921.
Shoeburyness—Council Offices	,, ,, Child Welfare Centre	August, 1921.
Braintree—Co-operative Buildings	,, ,, Tuberculosis Dispensary	January, 1923.
Epping—Epping Gas & Electricity Co.'s Showrooms	,, ,, ,,	March, 1923.
Saffron Walden—Adult School	,, ,, ,,	April, 1923.
Halstead—Cottage Hospital	,, ,, ,,	November, 1923.
Brightlingsea—New Church Schools	,, Tuberculosis Dispensary and Child Welfare Centre	September, 1924.
Romford—29, Eastern Road ...	School Clinic and Tuberculosis Dispensary	School Clinic transferred to these premises in July, 1925.
Dunmow—47, Stortford Road...	,, ,, ,,	October, 1926
Dagenham—3, Finnymore Road	,, ,, ,,	October, 1926.
Weeley—Public Health Offices	,, Tuberculosis Dispensary and Child Welfare Centre.	November, 1926.

*Used by Local Sanitary Authority as Child Welfare Centre and Maternity Home

PART II.

TUBERCULOSIS.

Notifications.

A summary of the notifications made in the Administrative County of Essex during the period 3rd January, 1926, to the 1st January, 1927, is given below :—

TABLE X.

	Notifications on Form A.												
	Primary Notifications.												
	Age Periods.												
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards	Total Primary Notifications	Total Notifications on Form A.
Pulmonary, Males ...	—	12	33	19	75	83	174	155	90	31	16	688	771
,, Females ...	—	10	31	29	75	104	160	64	48	21	9	551	622
Non-Pulmonary, Males	11	51	32	22	14	12	18	6	2	3	1	172	179
,, Females	7	47	35	24	16	14	22	9	4	5	1	184	197

	Notifications on Form B.					Notifications on Form C.	
	Primary Notifications.						
	Age Periods.			Total Primary Notifications	Total Notifications on Form B.	Poor Law Institutions.	Sanatoria.
	Under 5	5 to 10	10 to 15				
Pulmonary, Males ...	—	—	—	—	—	41	479
,, Females ...	—	—	1	1	1	23	299
Non-Pulmonary, Males ...	—	2	1	3	3	1	58
,, Females	—	—	—	—	—	4	55

TABLE XI.

SHOWING SUPPLEMENTAL RETURN IN REGARD TO CASES NOT NOTIFIED UNDER THE PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS.

	Age periods.											Total cases.
	0 to 1.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 35.	35 to 45.	45 to 55.	55 to 65.	65 and upwards.	
Pulmonary, Males	—	5	18	20	12	19	51	39	23	9	8	204
,, Females	—	1	15	21	25	21	34	26	16	11	8	178
Non-pulmonary, Males	1	10	9	11	5	2	9	2	3	2	1	55
,, Females	1	8	9	3	4	2	3	3	1	—	5	39

TABLE XII.

SHOWING NUMBER OF CASES OF TUBERCULOSIS REMAINING ON THE REGISTERS OF NOTIFICATIONS KEPT BY THE DISTRICT MEDICAL OFFICERS OF HEALTH ON THE 31ST DECEMBER, 1926.

Pulmonary.			Non-Pulmonary.			Total Cases.
Males.	Females.	Total.	Males.	Females.	Total.	
3580	3146	6726	1310	1305	2615	9341

TABLE XIII.

SHOWING THE WORK OF THE DISPENSARIES DURING THE YEAR 1926.

DIAGNOSIS.	PULMONARY.				NON-PULMONARY.				TOTAL.			
	Adults.		Children		Adults.		Children		Adults.		Children.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
A.—NEW CASES examined during the year (excluding contacts):—												
(*a*) Definitely tuberculous ...	315	230	11	19	20	42	42	47	335	272	53	66
(*b*) Doubtfully tuberculous ...	...	..	..	...	..	..	..	...	354	385	371	313
(*c*) Non-tuberculous ...	...	...	..	...	...	...	...	...	33	29	20	27
B.—CONTACTS examined during the year:—												
(*a*) Definitely tuberculous ...	5	5	...	...	...	1	...	1	5	6	..	1
(*b*) Doubtfully tuberculous ...	..	...	...	...	...	...	...	...	29	57	110	99
(*c*) Non-tuberculous ...	...	...	...	...	..	...	...	...	10	10	11	17
C.—CASES written off the Dispensary Register as												
(*a*) Cured	39	43	40	15	3	8	25	20	42	51	65	35
(*b*) Diagnosis not confirmed or non-tuberculous (including cancellation of cases notified in error) ..	...	...	...	...	...	...	...	...	133	187	309	236
D.—NUMBER OF PERSONS on Dispensary Register on Dec. 31st:—												
(*a*) Diagnosis completed ...	1589	992	337	300	201	178	332	296	1790	1170	669	596
(*b*) Diagnosis not completed ...	...	...	...	...	...	...	...	...	192	189	246	243

1.	Number of persons on Dispensary Register on January 1st		4950
2.	Number of patients transferred from other areas and of "lost sight of" cases returned		87
3.	Number of patients transferred to other areas and cases "lost sight of" ..		1051
4.	Died during the year		446
5.	Number of observation cases under A (*b*) and B (*b*) above in which period of observation exceeded 2 months ...		440
6.	Number of attendances at the Dispensary (including contacts) ...		20080
7.	Number of attendances of non-pulmonary cases at Orthopædic Outstations for treatment or supervision ...		20
8.	Number of attendances at General Hospitals or other Institutions approved for the purpose, of patients for		
	(*a*) "Light" treatment ...		1048
	(*b*) Other special forms of treatment		26
9.	Number of patients to whom Dental Treatment was given at or in connection with the Dispensary... ...		84
10.	Number of consultations with medical practitioners:—		
	(*a*) At homes of applicants ...		529
	(*b*) Otherwise		1294
11.	Number of other visits by Tuberculosis Officers to Homes...		1953
12.	Number of visits by Nurses or Health Visitors to Homes for Dispensary purposes		16053
13.	Number of		
	(*a*) Specimens of sputum, &c., examined		4895
	(*b*) X-ray examinations made in connection with Dispensary work		381
14.	Number of insured persons on Dispensary Register on the 31st December ...		2219
15.	Number of insured persons under Domiciliary Treatment on the 31st December		994
16.	Number of reports received during the year in respect of insured persons:—		
	(*a*) Form G.P. 17		39
	(*b*) Form G.P. 36		142

TABLE XIV.

RESIDENTIAL INSTITUTIONS.

(*a*) Showing the Average Number of Beds Available for Patients during the Year 1926.

—	Pulmonary Tuberculosis.			Non-Pulmonary Tuberculosis.		Total.
	Observation.	Sanatorium Beds.	Hospital Beds.	Disease of Bones & Joints.	Other Conditions.	
Adult Males	6	101	21	16	4	148
Adult Females	6	83	17	12	9	127
Children under 15	10	66	6	42	24	148
Total	22	250	44	70	37	423

(*b*) Showing the Extent of Residential Treatment during the Year 1926.

			In Institutions on Jan. 1st.	Admitted during the year.	Discharged during the year.	Died in the Institutions.	In Institutions on Dec. 31st.
Number of Patients ...	Adults.	M.	143	479	411	40	171
		F.	86	384	328	32	110
	Children.	M.	67	99	98	...	68
		F.	45	83	103	...	25
Number of Observation Cases	Adults.	M.	6	15	15	...	6
		F.	2	20	20	...	2
	Children.	M.	1	19	19	...	1
		F.	4	24	25	...	3
Total ...			354	1125	1019	72	386

TABLE XV.

SHOWING THE IMMEDIATE RESULTS OF TREATMENT OF PATIENTS AND OF OBSERVATION OF DOUBTFUL CASES DISCHARGED FROM RESIDENTIAL INSTITUTIONS DURING THE YEAR 1926.

Classification on admission to the Institution.		Condition at time of discharge.	Duration of Residential Treatment in the Institution.												Total
			Under 3 months.			3-6 months.			6-12 months.			More than 12 months.			
			M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
Pulmonary Tuberculosis.	Class T.B. minus.	Quiescent	3	20	6	3	16	9	2	1	6	...	...	5	71
		Improved	72	46	23	24	26	29	4	5	10	...	...	..	239
		No material improvement	21	20	6	2	5	1	...	1	..	...	..	...	56
		Died in Institution	6	2	..	...	1	..	...	...	...	...	..	...	9
	Class T.B. plus. Group 1.	Quiescent	4	2	...	2	3	...	3	...	1	...	...	..	15
		Improved	29	6	1	10	9	2	4	...	1	1	...	...	63
		No material improvement	6	6	...	1	2	...	...	...		...	...	...	15
		Died in Institution	3	1	...		...	...	...	...	...	...	...	...	4
	Class T.B. plus. Group 2	Quiescent	4	4	...	1	2	...	2	...	...	...	...	...	13
		Improved	57	28	1	32	23	..	3	9	1	...	1	...	155
		No material improvement	19	13	2	3	9	..	2	...	..	...	...	...	48
		Died in Institution	8	9	...	4	...	...	..	..	..	...	...	...	21
	Class T.B. plus. Group 3.	Quiescent	3	2	..	1	1	...	...	...	...	..	...	...	7
		Improved	15	6	...	9	8	1	..	...	...	2	...	...	41
		No material improvement	17	6	1	6	7	..	4	..	..	...	...	...	41
		Died in Institution	13	14	..	2	1	...	1	1	...	...	1	...	33
Non-Pulmonary Tuberculosis.	Bones and Joints.	Quiescent or Arrested	...	2	3	5	2	4	1	2	8	2	1	6	36
		Improved	4	6	9	5	3	3	2	1	3	1	1	6	44
		No material improvement	4	2	...	...	...	...	1	...	...	...	...	...	7
		Died in Institution	1	..	...	1	...	...	...	...	...	...	1	...	3
	Abdominal.	Quiescent or Arrested	..	...	5	...	1	3	...	...	...	...	...	...	9
		Improved	1	4	2	...	2	...	1	...	1	...	..	...	11
		No material improvement	1	1	2	...	...	...	...	1	...	...	...	..	5
		Died in Institution	...	...	...	1	...	...	...	...	...	...	...	...	1
	Other Organs.	Quiescent or Arrested	1	..	...	1	1	2	...	1	...	...	...	...	6
		Improved	1	2	...	...	1	2	...	...	...	...	...	2	8
		No material improvement	1	...	..	...	...	...	..	..	...	...	...	...	1
		Died in Institution	...	...	..	...	...	...	1	...	...	...	..	...	1
	Peripheral Glands.	Quiescent or Arrested	..	2	3	2	...	7	...	...	3	...	...	...	17
		Improved	3	4	9	1	1	10	...	...	2	...	...	...	30
		No material improvement	1	..	...	...	...	...	...	1	...	...	...	...	2
		Died in Institution	...	...	...	...	...	...	...	...	...	...	..	...	...
			Under 1 week.			1-2 weeks.			2-4 weeks.			More than 4 weeks.			
Observation for purpose of diagnosis.		Tuberculous	...	...	...	..	...	...	...	...	...	...	1	3	4
		Non-tuberculous	...	...	...	...	..	3	1	...	3	2	4	14	27
		Doubtful	1	1	4	.	...	1	1	2	3	10	12	13	48

TABLE XVI.

(A) Pulmonary Tuberculosis.

Table showing in summary form the condition of all patients whose case records are in the possession of the Dispensaries at the end of 1926, arranged according to the years in which the patients first came under public medical treatment for Pulmonary Tuberculosis, and their classification as shown on Form A.

Condition at the time of the last record made during the year to which the Return relates.			Previous to 1926.					1926.				
			Class T.B. Minus.	Class T.B. Plus.				Class T.B. Minus.	Class T.B. Plus.			
				Group 1.	Group 2.	Group 3.	Total (Class T.B. Plus).		Group 1.	Group 2.	Group 3.	Total (Class T.B. Plus).
Alive. Discharged as cured.	Adults.	M.	34	5	...	...	5	...	...	...	...	...
		F.	39	2	2	...	4	...	...	...	...	...
	Children.	M.	40	...	...	...	...	...	...	...	...	...
		F.	15	...	...	...	...	...	...	...	...	...
Alive. Disease arrested.	Adults.	M.	239	40	42	3	85	...	...	...	...	...
		F.	173	17	14	4	35	...	...	...	...	...
	Children.	M.	110	2	...	1	3	...	...	.	...	...
		F.	81	1	2	...	3	..	...	...	...	...
Alive. Disease not arrested.	Adults.	M.	360	105	298	74	477	159	71	129	28	228
		F.	227	36	162	53	251	165	34	75	26	135
	Children.	M.	127	3	5	...	8	74	...	3	2	5
		F.	118	11	4	3	18	66	3	...	2	5
Condition not ascertained during the year			83	6	6	...	12	...		...	...	...
Lost sight of or otherwise removed from the Dispensary Register ...			537	89	69	15	173	71	7	13	3	23
Dead.	Adults.	M.	31	6	61	88	155	16	4	21	18	43
		F.	21	3	34	59	96	5	2	21	12	35
	Children.	M.	4	...	...	1	1	2	...	..	..	..
		F.	4	...	2	2	4	...	...	...	...	...
Totals			2243	326	701	303	1330	558	121	262	91	474

(B) Non-Pulmonary Tuberculosis.

Table showing in summary form the condition of all patients whose case records are in the possession of the Dispensaries at the end of 1926, arranged according to the years in which the patients first came under public medical treatment for Non-Pulmonary Tuberculosis, and their classification as shown on Form A.

Condition at the time of the last record made during the year to which the Return relates.				Previous to 1926					1926.				
				Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.
Alive.	Discharged as cured.	Adults.	M.	1	1	...	1	3	...	..	...	...	...
			F.	7	...	...	1	8	...	...	...	...	...
		Children.	M.	10	2	1	12	25	...	...	...	...	...
			F.	2	1	2	15	20	...	...	...	...	...
	Disease arrested.	Adults.	M.	27	5	5	7	44	...	...	...	...	...
			F.	19	4	2	6	31	...	...	...	...	...
		Children.	M.	49	19	6	30	104	...	...	...	...	...
			F.	23	8	4	26	61	...	...	...	...	...
	Disease not arrested.	Adults.	M.	52	3	20	9	84	21	3	5	2	31
			F.	37	3	22	25	87	17	8	6	23	54
		Children.	M.	67	14	4	55	140	23	9	7	39	78
			F.	64	12	8	60	144	21	7	5	46	79
Transferred to Pulmonary ...				...	...	...	...	...	..	...	...	...	...
Condition not ascertained during the year				17	2	2	20	41	...	...	...	...	...
Lost sight of or otherwise removed from Dispensary Register ...				69	58	40	55	222	14	1	3	11	29
Dead.		Adults.	M.	4	2	1	1	8	...	...	...	...	...
			F.	2	1	...	2	5	...	1	...	...	1
		Children.	M.	3	2	2	1	8	3	...	..	...	3
			F.	1	2	..	...	3	...	1	...	...	1
Totals				454	139	119	326	1038	99	30	26	121	276

Notifications.

The number of cases shown in Table XI. as coming under notice during the year other than by notification under the Public Health (Tuberculosis) Regulations, is rather high but is explained by the new system of records in accordance with the Ministry of Health Memorandum 37 T., which brought to light a considerable number of cases that had not been formerly notified. Most of these were T.B. Minus cases and this probably accounts in some measure for notification not taking place.

Table XII. shows that at the end of 1926 there were 687 more notified cases on the registers of the District Medical Officers of Health than there were at the end of 1925.

It will be seen from Table XVII. that of the 622 deaths from tuberculosis during the year 87 were apparently not notified and 80 were not notified until after death. Though the efforts which have been made to impress on general practitioners the necessity for early notification of cases of tuberculosis have resulted in some improvement, further action will be necessary. The fact that the Ministry of Health now desire Tuberculosis Officers to notify cases themselves if they are satisfied that notification has not previously taken place and they are unable to get the general practitioner concerned to notify, has also led to a number of cases being notified which would probably have otherwise remained unnotified.

Deaths.

The total number of deaths in Table XXI, shows a decrease of 82 as compared with the deaths during 1925.

Medical and Nursing Service.

(*a*) Tuberculosis Officers. Several changes have taken place in the Medical Staff during the year and a complete list as at 31st December, 1926, is given on page 9.

The services of Sir Henry J. Gauvain have continued to be of great assistance in connection with the diagnosis and treatment of surgical tuberculosis.

Dr. W. Burton Wood, as Consulting Tuberculosis Officer, has been of great assistance in advising on pulmonary tuberculosis and has visited all the dispensaries and sanatoria inside and outside the County where there are Essex patients. His consultations have been productive of improvements in the service, and there can be no question that his appointment has been abundantly justified.

I append at the end of this Section a short report by Dr. Wood, which will be read with great interest by all concerned in the tuberculosis campaign.

(*b*) Tuberculosis Nurses. The work of the Health Visitors in visiting the homes of patients has shown an increase, and as the Tuberculosis Dispensary is being used more and more as a consultation centre it is necessary for the Health Visitors to pay more visits to patients' homes than hitherto in order that patients may be kept in touch with the dispensary.

TABLE XVII.

SHOWING DEATHS FROM TUBERCULOSIS REGISTERED WITH LOCAL REGISTRARS OF BIRTHS AND DEATHS IN THE ADMINISTRATIVE COUNTY DURING 1926, AND PARTICULARS REGARDING NOTIFICATION UNDER THE PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912. (*Transferable Deaths are excluded*).

DISTRICTS.	No. of Deaths.	When Notified.							No Information.
		After Death	Within 3 months of death.	Within 3–6 months of death.	Within 6-12 months of death.	Within 1–2 years of death.	Within 2–4 years of death.	More than 4 years before death.	
Urban.									
Barking	27	3	7	4	6	1	2	1	3
Braintree	4	...	1	1	2	...	...	...	...
Brentwood	2	...	...	1	1	...	...	...	...
Brightlingsea	4	...	...	...	2	...	1	...	1
Buckhurst Hill	5	1	1	...	1	1	1	...	...
Burnham-on-Crouch	2	...	1	...	1	...	...	...	...
Canvey Island	5	...	5	...	...	...	...	...	...
Chelmsford B.	18	3	3	2	2	1	4	...	3
Chingford	6	1	1	..	1	...	1	...	2
Clacton-on-Sea	3	...	...	...	1	1	...	..	1
Colchester B.	36	7	9	6	2	3	1	4	4
Dagenham	18	4	3	...	3	2	3	1	2
Epping	4	...	2	1	...	1	...	...	...
Frinton-on-Sea	...	...	...	...	...	...	...	...	...
Grays	11	3	3	1	...	1	1	...	2
Halstead	3	...	...	...	...	...	..	1	2
Harwich B.	5	2	3	.	...	...	...	...	...
Hornchurch	9	...	2	...	1	3	...	...	3
Ilford	59	10	17	7	5	7	9	3	1
Leyton	90	12	17	12	15	6	11	6	11
Loughton	5	1	1	...	...	...	1	...	2
Maldon B.	4	..	...	...	3	...	1	...	...
Romford	15	3	2	2	2	1	2		3
Saffron Walden B.	2	...	...	...	1	...	...	...	1
Shoeburyness	3	...	1	...	...	2	...	...	...
Tilbury	7	1	1	...	1	1	1	2	...
Waltham Holy Cross	4	3	1		...	...	...	...	...
Walthamstow	103	12	19	10	24	9	13	4	12
Walton-on-the-Naze	...	...	...	...	...	...	...	...	...
Wanstead	3	1	1	...	...	..	...	1	...
West Mersea	1	...	...	...	..	1	...	...	...
Witham	3	...	1	...	...	...	...	1	1
Wivenhoe	...	...	...	...	.	...	...	...	...
Woodford	6	2	...	1	1	1	...	...	1
Totals	467	69	102	48	75	42	52	24	55
Rural.									
Belchamp	...	4	...	...	..	..	...	...	...
Billericay	21	1	4	2	2	2	3	4	...
Braintree	11	...	5	2	...	1	1	...	1
Bumpstead	3	...	2	...	...	...	..	...	1
Chelmsford	13	...	4	2	2	1	2	...	2
Dunmow	2	...	...	...	2	...	...	...	...
Epping	2	...	...	...	...	1	...	...	1
Halstead	4	...	...	1	1	1	...	...	1
Lexden and Winstree	13	1	4	...	3	2	1	1	1
Maldon	10	2	3	...	..	...	1	3	1
Ongar	8	...	4	...	...	1	1	...	2
Orsett	15	...	5	1	1	1	...	1	6
Rochford	18	..	3	4	1	...	1	1	8
Romford	13	2	4	2	...	2	1	...	2
Saffron Walden	6	1	1	1	...	...	...	...	3
Stansted	3	...	1	1	1	...	...	...	...
Tendring	13	...	4	...	1	3	1	1	3
Totals	155	11	44	16	14	15	12	11	32
URBAN DISTRICTS	467	69	102	48	75	42	52	24	55
RURAL DISTRICTS	155	11	44	16	14	15	12	11	32
TOTALS	622	80	146	64	89	57	64	35	87

The influx of population from London into the Dagenham and Becontree area has so materially increased the amount of tuberculosis visiting in this area that an additional Health Visitor is to be appointed.

The County Scheme.

During the year the principles outlined in Memorandum 37 T. have been adopted. The object of the memorandum was to institute a uniform system of records and classification throughout the country, but perhaps its most important feature is the insistence of a definite diagnosis within three months. At the end of this time, which is the period allowed for observation, the patient must either be registered as tuberculous or discharged. Although absolute certainty in diagnosis cannot always be attained within a limited period, it is advisable from every point of view that patients should not continue to attend the dispensaries for indefinite periods unless a definite diagnosis has been made. The continued attendances of numerous doubtful cases causes congestion at the dispensaries and prevents adequate time being available for examinations of new cases and the routine work of the dispensaries.

Table XVIII. shows the Dispensaries and Visiting Stations as at 31st December, 1926.

During the year a new visiting station was opened at Dagenham in order to cope with the large number of tuberculosis patients who have taken up residence on the London County Council's Estate at Dagenham. It is hoped to open a fully equipped Combined Treatment Centre there in the near future.

Contacts. It will be seen from Table XIII. that in compaarison with the number of new cases examined during the year the number of contacts is small. Allowance has to be made, however, for the fact that a large number of contacts refuse to attend the dispensaries, and others who are not feeling ill find it inconvenient to go to the dispensaries although evening sessions are held in the more important areas. Nevertheless, the present position cannot be regarded as satisfactory and every effort is being made to ensure the examination of as many contacts as possible.

Observation Cases. It will be seen that a number of observation cases exceeded the period laid down by the Ministry of Health, but as this is the first year during which the new memorandum has been in force, a progressive reduction in this number may be anticipated.

Co-operation with General Practitioners. The number of Forms G.P. 17 and 36 completed by medical practitioners during the year is fairly satisfactory. The scheme outlined by the Ministry of Health in Memorandum 286 has been more rigidly enforced during the year, and co-operation between the general practitioner and the Tuberculosis Officer as a consultant is becoming more satisfactory, particularly now it is known that the services of a County Consultant are also available.

TABLE XVIII.

DISPENSARIES AND VISITING STATIONS AT 31ST DECEMBER, 1926.

	Address.	Hours of Attendance.	Tuberculosis Officer.
1	BARKING— 37, Linton Road	Mondays, 3 to 5 p.m. Thursdays, 10.30 a.m. to 12.30 p.m.	Kerr Simpson, M.D., D.P.H., M.R.C.P.
2	BRAINTREE— Co-operative Buildings	Wednesdays, 11.30 a.m. to 1 p.m.	P. J. Gaffikin, M.C., M.D., B.Ch., B.A.O. D.P.H.
3	BRIGHTLINGSEA— New Church Schools	Wednesdays, 1st and 3rd in each month, 2 to 3 p.m.	W. A. Milne, M.B., Ch.B., D.P.H.
4	CHELMSFORD— General Hospital, London Road	Fridays, 2 to 4 p.m.	W. B. Wood, M.A., M.D., M.R.C.P., D.P.H.
5	CLACTON— Skelmersdale Road	Fridays, 11 a.m. to 12 noon	W. A. Milne, M.B., Ch.B., D.P.H.
6	COLCHESTER— 12, Trinity Street	Tuesdays, 10.30 a.m. to 12.30 p.m. Thursdays, 10.30 a.m. to 12.30 p.m.	W. F. Corfield, M.D., D.P.H. W. H. Alderton, M.C., M.R.C.S.
7	DAGENHAM— 3, Finnymore Road	Thursdays, 10 a.m. to 12 noon and 2 to 4 p.m.	W. L. Yell, M.B., Ch.B., D.P.H.
8	DUNMOW— 47, Stortford Road	Tuesdays, 1st and 3rd in each month, 10.30 to 11.30 a.m.	P. J. Gaffikin, M.C., M.D., B.Ch., B.A.O., D.P.H.
9	EPPING— c/o Gas and Electricity Co. Office, High Street	Thursdays, 11.30 a.m. to 1 p.m.	L. S. Fry, M.B., Ch.B., M.R.C.S., L.R.C.P., D.P.H.
10	GRAYS— Hilldrop House, 59, London Road	Mondays, 4 to 6 p.m. Thursdays, 2 to 4 p.m.	W. F. G. Boul, M.D., Ch.B., D.P.H.
11	HALSTEAD— Out-Patients' Dept., Cottage Hospital	Wednesdays, 2nd and 4th in each month, 11.30 a.m. to 1.30 p.m.	J. S. Ranson, M.R.C.S., L.R.C.P., D.P.H.
12	HARWICH— c/o Mr. Woodward, Corner Chemist, 1, Church Street	Tuesdays, 11 a.m. to 12 noon	J. Ramsbottom, M.B., Ch.B., D.P.H.
13	ILFORD— 38, Oakfield Road	Mondays, 7.30 to 8.30 p.m. Tuesdays, 3 to 5 p.m. Wednesdays, 10 a.m. to 12 noon. Fridays, 4 to 6 p.m.	W. L. Yell, M.B., Ch.B., D.P.H.
14	LEYTON— 180, High Road	Mondays, 2 to 4 p.m., and 6 to 8 p.m. Tuesdays, 10 a.m. to 12 noon. Thursdays, 10 a.m. to 12 noon, and 2 to 4 p.m. Fridays, 2 to 4 p.m.	P. L. T. Bennett, M.R.C.S., L.R.C.P., T.D.D., D.P.H. M. Barker, M.R.C.S., L.R.C.P., D.P.H.
15	MALDON— 114, High Street	Tuesdays, 2nd and 4th in each month, 10.30 to 11.30 a.m.	W. H. Alderton, M.C., M.R.C.S., L.R.C.P., D.P.H.
16	ROMFORD— 29, Eastern Road	Tuesdays and Fridays, 9.30 a.m. to 12.30 p.m.	‡N. E. Chadwick, M.B., Ch.B., M.R.C.S.
17	SAFFRON WALDEN— Adult Schoolroom, High Street	Tuesdays, 1st and 3rd in each month 2 to 4 p.m.	S. R. Richardson, B.A., M.D., B.Ch., B.A.O., D.P.H.
*18	SOUTHEND— 30, Clarence Street	Wednesdays, 2.15 to 4.15 p.m.	N. S. R. Lorraine, M.D., Ch.B., D.P.H., F.R.S. (Edin.)
19	WALTHAMSTOW— 334, Hoe Street	Mondays, 2 to 4 p.m. Tuesdays, 2 to 4 p.m. Wednesdays, 10 a.m. to 12 noon, and 6 to 8 p.m. Thursdays, 2 to 4 p.m. Fridays, 10 a.m. to 12 noon	J. Sorley, M.A., M.D., D.P.H., LL.B. M. Barker, M.R.C.S., L.R.C.P., D.P.H.

*For cases from Rochford Rural District and Shoeburyness Urban District by arrangement with the County Borough of Southend.

‡Replaced Dr. Wilkins at the end of the year.

Clerical Assistance. There is no doubt that the various schemes which have recently been inaugurated by the Ministry of Health have increased the clerical work of the Tuberculosis Officers. It is recognised that the Tuberculosis Officers' time should not be taken up with clerical work, and the question of providing clerical assistance at each dispensary has received careful consideration throughout the year and the matter is at present being dealt with by a Sub-Committee of the Public Health Committee.

Light Treatment. Most of the 1,048 attendances referred to were made at the Light Department of the London Hospital. In addition to these attendances, four patients were boarded out near to the London Hospital at the expense of the County Council in order to enable the patients to attend for daily treatment, which they could not otherwise have done owing to the distance of their homes from London.

It is interesting to record one particular case - a case of lupus of the face—which after attending the London Hospital for five years, has been discharged as cured.

Ultra Violet Light Treatment is also given at the Chadwell Heath Sanatorium for suitable male adult patients suffering from surgical tuberculosis.

Artificial Pneumo-thorax Treatment. Patients requiring artificial Pneumo-thorax Treatment have been sent to the City of London Hospital for Diseases of the Heart and Lungs and to similar institutions. If X-rays are installed at Harold Court Sanatorium male patients recommended for this form of treatment, which is of the utmost value in selected cases, will obtain it at that institution.

X-ray Facilities. In view of the increasing importance attached to the employment of X-rays in the diagnosis and treatment of pulmonary tuberculosis, it is satisfactory to be able to report progress in the facilities available throughout the County for this purpose. Arrangements have been made for a limited number of X-ray photographs to be taken at various hospitals throughout the County, and in one instance by a private radiologist.

The lack of an X-ray Department at the Harold Court Sanatorium has continued to be a source of difficulty and as mentioned above, it has been impossible to carry out artificial pneumo-thorax treatment at this Institution. Patients whose treatment necessitates the use of X-rays have had to be transferred to the Victoria Park Hospital. This matter is at present receiving the consideration of the Public Health Committee.

Dental Treatment. The number of patients receiving dental treatment during the year is not very high, but this is explained by the fact that most Approved Societies now include amongst their benefits the provision of dental treatment, and patients requiring such treatment therefore approach their Approved Societies. In addition there were 57 patients at sanatoria who were found to require dental treatment, and this was arranged either by a dentist visiting the sanatorium or the patient visiting the nearest dental clinic.

Shelters. During the year there was an average number of 75 domiciliary shelters occupied by patients at their homes.

Extra Nourishment. The provision of extra nourishment during the year has been continued and every effort has been made to ensure that the patients granted extra nourishment come within the classification laid down by the Ministry of Health. An inquiry is also made into the financial circumstances of each patient before any assistance is given under the County Scheme.

The amount expended on extra nourishment during the year 1926 was £189 17s. 3d.

Travelling Facilities for Patients. Necessitous cases have been supplied with free travelling vouchers to enable them to travel to and from sanatoria, etc., and the cost of such vouchers issued during the year 1926 was £147 1s. 3d.

Contributions by Patients towards Cost of Treatment. The practice of asking patients or their parents to contribute according to their means towards the cost of institutional treatment or the provision of surgical appliances has been continued. The amount received from such sources during the year was £2,135 19s. 4d. Legal enforcement of such contributions by patients is to be deprecated, but the aim is to accept small contributions from a willing and grateful patient or guardian.

No contributions are asked for ex-service patients, necessitous cases, and patients who are only in receipt of National Health Insurance benefit.

Institutional Accommodation. The average number of 423 beds available for patients during the year proved to be insufficient. Towards the end of the year a heavy waiting list resulted. Provision has therefore been made for this number to be increased to 450 for the year 1927.

As there has hitherto been no adequate hospital accommodation available for advanced cases, 10 beds have been reserved for patients of this type at the Harold Court Sanatorium. This is not a satisfactory arrangement as the sanatorium should be reserved for the treatment of patients who are likely to derive benefit, if not a complete cure, from such treatment. The presence of patients, whose days are obviously numbered, at sanatoria must exercise a deleterious effect upon the other patients. Further, the situation of Harold Court Sanatorium in a district subject to invasion by winter fogs, makes its position far from ideal for the treatment of patients who require a dry atmosphere and warmth. Steps are therefore being taken to secure other accommodation for patients of the advanced type, and this matter will be dealt with in next year's report. Meanwhile, accommodation has been reserved at the Colchester Sanatorium for six patients (three of either sex) from the north-eastern portion of the County who require hospital treatment. This small provision appears to be sufficient for this area, but in the extra-metropolitan district 20 beds for men and ten for women would probably be the minimum required.

TABLE XIX.

STATEMENT SHOWING AVERAGE COST PER PATIENT PER WEEK FOR THE TREATMENT OF TUBERCULOUS PERSONS IN COUNTY SANATORIA DURING THE YEAR ENDED 31ST MARCH, 1927.
(kindly supplied by the County Accountant).

Item of Expenditure.	Black Notley. (Average No. of Patients 42·95).		Harold Court. (Average No. of Patients 51·42).		High Beech. (Average No. of Patients 35·97).		Sible Hedingham. (Average No. of Patients 30·84).	
	Amount.	Average cost per Patient per week.	Amount.	Average cost per Patient per week.	Amount.	Average cost per Patient per week.	Amount.	Average cost per Patient per week.
	£	d.	£	d.	£	d.	£	d.
Salaries	1050	112·52	1811	162·12	1880	240·59	609	90·90
Provisions	1216	130·31	2568	229·89	664	84·97	593	88·52
Drugs and Medical Appliances	68	7·29	133	11·91	227	29·05	16	2·39
Fuel, Light and Water	219	23·47	503	45·03	186	23·80	119	17·76
Domestic Renewals, Repairs, &c.	135	14·47	356	31·87	199	25·48	61	9·11
Laundry	182	19·50	415	37·15	126	16·12	74	11·05
Structural Renewals, Repairs, &c.	263	28·18	634	56·75	254	32·50	58	8·66
Garden	8	·86	...	...	54	6·91	34	5·08
Travelling Expenses of Patients and Staff .	124	13·29	368	32·94	193	24·70	68	10·15
Printing, Stationery, &c.	31	3·32	79	7·07	24	3·07	24	3·58
Rates, Taxes, Insurance	51	5·47	97	8·68	106	13·56	52	7·76
Rent and Loan Charges	215	23·04	885	79·22	72	9·21	120	17·91
Capital Expenditure defrayed from Revenue ...	41	4·39	5	·45	65	8·32	64	9·55
Miscellaneous	31	3·32	66	5·91	31	3·97	8	1·19
Gross Total	3634	389·43	7920	708·99	4081	522·25	1900	283·61
Profit on Farm Account	...	...	17	1·52	...	...	...	...
Other Receipts	1	·11	86	7·70	16	2·05	15	2·24
Nett Total	3633	389·32	7817	699·77	4065	520·20	1885	281·37
	(£1. 12s. 5d.)		(£2. 18s. 4d.)		(£2. 3s. 4d.)		(£1. 3s. 5d.)	

Female patients from the extra-metropolitan area who are suffering from an advanced type of the disease, have been sent to the Chingford Sanatorium—again not a satisfactory arrangement but the only feasible one under present conditions.

The accommodation at the County Sanatoria is much below that required for dealing with the large number of Essex patients requiring institutional treatment, and in consequence a considerable portion of these patients has had to be sent to outside institutions. This system has one advantage as it enables an institution to be chosen which is most suitable for the needs of the patient concerned. During the year a special effort has been made to select institutions which are suitable in all respects for the patients' needs. Thus, while the sanatoria near Colchester and at Black Notley are well suited for young patients with early disease, older patients and those suffering from more advanced disease require more sheltered conditions such as those provided at the Marillac Sanatorium, near Brentwood. As a result of this careful selection there has been a noteworthy absence of complaints during the year, and except where family affairs have necessitated a patient's return home, the periods of treatment recommended have in practically all cases been completed.

The Hermitage Sanatorium, Isle of Wight, has served as an annexe to the Harold Court Sanatorium. Patients who have made good progress in the latter institution and who are ready to commence graduated work on a more extended scale than is possible at the Harold Court Sanatorium, have been sent to the Hermitage Sanatorium. The Consulting Tuberculosis Officer has paid frequent visits to the Hermitage Sanatorium and a link has thus been maintained between the County Council and the patients sent to that institution. As a result of his representations certain improvements have been made in the details of the management at the Hermitage Sanatorium, where the patients now express themselves as well satisfied with the treatment they are receiving. The County is indebted to the Medical Superintendent and the Resident Medical Officer for the desire they have shown to co-operate with the County Council in everything tending to the increased comfort of the patients in their charge.

Seven beds at the Chadwell Heath Sanatorium, which had been previously used for adult males suffering from various stages of pulmonary tuberculosis, were set aside for an observation block. A system for an exhaustive investigation of these cases has been drawn up in conjunction with the Consulting Tuberculosis Officer and Dr. W. L. Yell, the Visiting Tuberculosis Officer, and it is hoped to bring this scheme into operation early next year. These beds should meet a need which has been felt for a long while. It is hoped that similar facilities for female cases will also become available during the ensuing year.

Care Associations. Table XX. shows the various Care Associations in the County. During the year a new Care Association was inaugurated for the Walthamstow district, where there is ample work for such an Association.

The work of the Care Associations has continued to be of the greatest value and the County Authorities are much indebted to the large number of voluntary workers who give so much time and care to this particular work.

The most valuable work performed by these admirable Associations has been (*a*) the provision of convalescent holidays for children known to have been exposed to tuberculous infection and (*b*) the finding of suitable employment for patients who have recovered their health by sanatorium treatment.

TABLE XX.

TUBERCULOSIS CARE ASSOCIATIONS IN ESSEX.

Name of Association.	Day and Time of Meetings.	Year ended.	Income including Balance in hand.	Expenditure.		Total No. of Cases assisted.	Nature of Assistance Provided.
				Cases assisted.	Other Items.		
			£ s. d.	£ s. d.	£ s. d.		
BARKING ...	Third Tuesday in the month at 8 p.m.	31/3/27	280 2 8	152 16 8	12 4 7	49	Extra nourishment Clothing
CHELMSFORD ...	Fourth Monday in each month at 7 p.m. (August and December excluded)	31/3/27	388 7 3	240 4 8	49 9 6½	48	Extra nourishment Clothing Nursing attendance Rail expenses Provision of tools and material for art work Convalescent treatment
COLCHESTER ...	Friday, 7 p.m. No fixed dates.	31/3/27	15 0 6	6 8 4	1 6	6	Extra nourishment Clothing Dentures
HALSTEAD ...	Second Tuesday in the months of Jan., April, July and Oct. at 2.45 p.m.	31/3/27	14 1 1 (Drawn from Central Fund of Halstead Care of Children Committee).	12 15 1	1 6 0	6	Extra nourishment
ILFORD ...	First Thursday in each month at 7.30 p.m.	31/3/27	431 14 2	263 7 6	18 6 2	46	Extra nourishment Clothing Boots
LEYTON ...	Second Friday in each month at 7 p.m.	31/3/27	480 4 11	262 9 5	38 4 0	133	Extra nourishment Clothing and boots Dentures Cash and loans Handicraft & training Convalescent treatment Employment, provision of tools, etc. Advisory
ROMFORD ...	Third Friday in each month at 8 p.m.	31/3/27	352 5 2	210 9 10	54 14 10	47	Extra nourishment
SAFFRON WALDEN	Fourth Tuesday in each month at 2.30 p.m.	30/4/26	103 11 10	63 11 11	3 13 10	21	Convalescent treatment at Hunstanton Extra nourishment
‡ WALTHAMSTOW	First Friday in each month at 7 p.m.	31/3/27	26 19 6	4 0 10	6 15 6	34	Dentures Travelling expenses Clothing and boots Training (motor driving) Advisory

‡ For six months only. Association formed October, 1926.

TUBERCULOUS INFECTION IN EARLY LIFE.

Tuberculosis is only the manifestation of local successes in an attack on the whole community by an adversary whose numbers are in the most literal sense of the word unlimited. We are too apt to think of Tuberculosis in terms of disease rather than in those of infection, and so to take too narrow a view.

In a civilised community the chances of infection are so manifold that few, if any, can hope to pass through life without acting at some period as the unwilling hosts of this all pervading microbe. The elimination of the tubercle bacillus in our time cannot be hoped for. The combined resources of the rest of the world devoted to four years of unintermittent slaughter failed to make any considerable impression on a population of 60,000,000 Germans. When we consider that a single consumptive may expectorate that number of tubercle bacilli ten times over in the course of 24 hours, it is obvious that the task of stamping out the bacillus is well nigh impossible.

In planning our campaign against Tuberculosis we must never lose sight of this fact; the sufferers from Tuberculosis whom we are called upon to treat are only the casualties of the campaign. The battle is not waged in the casualty clearing station and base hospitals. The attack is conducted elsewhere. Every measure designed to improve the general health of the community, and especially every effort to safeguard the health of the younger generation should be regarded as part of the anti-tuberculosis campaign. It is better to erect sound defences than to multiply first aid posts. It was a wise man who first maintained that good houses are the best sanatoria. An open-air school is a sounder investment than a children's sanatorium.

The attack of Tuberculosis is primarily directed against childhood. The middle-aged consumptive, often at work, wholly unaware that his expectoration is loaded with tubercle bacilli and not seldom ignorant that he suffers from anything worse than Bronchitis, serves merely as an ordnance depôt from which the enemy draws his ammunition for use in his campaign against the young. The attack of Tuberculosis is well directed, for the defences of the young are weak and easily overthrown.

It may be asked why only a minority of children suffers from tuberculous disease, for we know that chances of infection are manifold and have good reason to believe that few children can escape infection. The question is pertinent. The answer is not beyond dispute. Yet a clue to the solution of the problem may be found if we remember that two of the most important factors in determining the success of attack of any infectious microbe are the size of the infecting dose and the resistance of the individual. If the dose is massive, if the resistance of the individual is low, it will probably be successful; if both factors are combined the victim of attack will inevitably succumb.

Simple souls have always held that Nature, who provides convenient dock leaves in the vicinity of nettles, supplies a suitable antidote to every poison. The rule holds good when applied to the invasion of the human organism by bacterial poisons. In response to the stimulus of foreign bodies (as bacteria), the body provides specific anti-bodies to neutralise their baneful effects. But, whereas the poison is destroyed the antidote, once formed, remains and forms a reserve capable of being used in the future. Repeated infections by constantly stimulating the defensive mechanism of the body will thus result at last in more or less complete immunity to attack by the special microbe concerned, provided the attack is not too strong or the defence too weak. The resistance of the individual is thus built up by degrees. On the other hand, severe infection may overwhelm the body before its defensive forces have been mobilised. Between these extremes alternating successes may lie with microbe or antidote, leading to disease on the one hand and healing on the other.

Let us apply these principles to the problem we are considering. Consider the case of an infant exposed to massive infection with tuberculosis through close contact with a consumptive mother. Infection will almost inevitably occur before the child's defence has been established. We should expect an acute attack of Tuberculosis and a fatal result. Mortality rates in young children exposed to such risks abundantly support our expectation.

The number of children exposed to the risks indicated above is, however, not large. Infection of milder degree is much more common. During the period in which immunity is being established, if the efforts of the body to counteract the effects of tuberculous infection are supported by good hygienic conditions, the child may pass through the period of infection and the establishment of immunity without suffering in any way. In other instances, immunity is not established without a keen struggle. The child's body becomes the field of a stubborn contest between attack and defence. Malnutrition, pallor, fever, lassitude, bear witness to the struggle that is taking place. The issue hangs in doubt. As yet, no definite sign of tuberculous disease is forthcoming. It is to a child in this condition that the term "pre-tuberculous" has been applied and such form no small proportion of children admitted to sanatoria. The term is unscientific. The "pre-tuberculous" child is in reality the "post-tuberculous" child, a child infected with tubercle which has not yet obtained sufficient foothold to cause obvious pathological change in any organ but which is striving to obtain such a footing as will enable it to produce disease. Some clinicians, indeed, regard this as a stage through which most children must pass, and have drawn an analogy between Mange in puppies and Tuberculosis in childhood. This represents an extreme view which cannot be substantiated. Tuberculous infection is only one of the causes of debility in childhood and the results of a slow poisoning of the tissues by the poisons given off by the tubercle bacillus closely resemble those due to infections by other bacteria. The child who is suffering from the milder grades of rheumatism or from septic conditions

of the throat and nose, presents a picture very similar to that of the child infected with tubercle. A disordered condition of the digestive system due to improper feeding, also gives rise to a chronic malaise sometimes difficult to distinguish from the results of a bacterial invasion. The problem that confronts the Tuberculosis Officer in the children's clinic at the dispensary is thus one of great complexity, and without a period of close observation and investigation at a residential institution it is often impossible to decide whether a child is or is not suffering from latent Tuberculosis.

"Consumption" in the sense in which the word is applied in adults is one of the rarest of children's diseases. It is not easy to say why this should be so. It is probable that consumption in the adult is usually the result of infection in earlier life. The tubercle bacillus having gained an entrance into the body and having suffered heavy casualties from the defensive forces of the body seeks refuge in glands or other deep-seated organs; at a later date, when the strain of adolescence causes a weakening of the body's resistence to disease, the dormant bacilli emerge from their hiding places, attack the lungs and pulmonary tuberculosis results. From the age of puberty to that of full growth pulmonary tuberculosis is common Before this period it is as we have seen, very rare. It is noteworthy that in middle age, when the physical powers begin to decline, pulmonary tuberculosis often breaks out in those who have suffered from abortive disease in earlier life. A resistance till now sufficient to hold the tubercle bacillus in check wanes and a sluggish type of disease is the result, proving that though resistance is diminished it is not by any means abolished.

Pulmonary tuberculosis occurring in young adults may, as we have seen, be the legacy of an infection in childhood. An example may serve to emphasise this point: "Mrs, P., a poor widow occupying a small wooden cottage in the marshes of South Essex contracted pulmonary tuberculosis. She was under treatment for many years at one of the dispensaries and brought with her her two small boys as contacts to be kept under observation. One of these was under continuous observation from the age of 4 to 14 years. Living in such intimate contact with a case of open Tuberculosis under conditions the reverse of helpful, infection was inevitable. The boy's physical condition remained poor, but he developed no signs of active disease. His mother died when he was about 10 years old. At the age of 16 he began to suffer from cough and at once reported to the local Dispensary and was admitted to a County sanatorium, suffering from a sluggish type of pulmonary tuberculosis." The outlook in such a case is hopeful. If he had not established a fair resistance he would have died in early childhood. We may assume that the mother had learnt careful habits through the dispensary, and that though infection was inevitable he was not subjected to massive doses of bacilli. Under the strain of adolescence a breakdown occurs. The sanatorium provided the means of restoring his resistance to its former level.

If the only types of Tuberculosis occurring in children and young people were those we have been considering, the problem of Tuberculosis would give rise to little anxiety. The acute Tuberculosis of early infancy is preventable. No baby need be exposed to the risk of massive tuberculous infection. The baby plays a passive rôle and infection is the result of crass ignorance or gross carelessness on the part of others.

The child of school age cannot be protected from the risks of contact with the outer world, but as we have seen, infection if not overwhelming by reason of dose or constant repetition can be resisted. We need feel no special anxiety about the future of the "pre-tuberculous" child. The after history of children who have passed through Sible Hedingham is suggestive.

Of 73 children treated at the Sanatorium in 1920, 7 have been "lost sight of," 60 are reported to be free from any signs of active Tuberculosis, while 6 are dead. Tuberculosis is reported as the cause of death, but this figure is probably too high. A diagnosis of Tuberculosis has an adhesive quality. A delicate child who has passed through a children's sanatorium dies of simple broncho-pneumonia. Death will probably be attributed to a tuberculous broncho-pneumonia. An infant coming from tuberculous stock dies of acute inflammation of the intestines. "Consumptive bowels" will be given as the cause of death. But the all-important fact to be noted is that the large majority of children diagnosed as suffering from tuberculous infection in early life recover and remain free from the signs of tuberculous disease.

From the age of about 14 years onward, through adolescence and early adult life, we encounter a type of tuberculous infection of far more sinister import than that which occurs during the elementary school period. This is the form of consumption that causes the early decline so dreaded by former generations and which remains the chief cause of death among the young of to-day. Now, if we go into the past history of young patients suffering from Pulmonary Tuberculosis of this type, who exhibit the classic signs of the disease—the "churchyard cough," the hectic flush, the wasting frame, and the pathetic hopefulness of outlook when manifestly all hope is gone, we shall be struck by the fact that a history of a healthy childhood is the rule. The early days of these patients were not associated with the Cod Liver Oil pot, the School Clinic was seldom visited for those "proper examinations" that now rival the bottle of medicine in popular esteem. Suddenly out of a cloudless sky the bolt falls. The young person "who has never known a day's illness" develops a a cough. After a few weeks the signs of manifest ill-health compel a visit to the doctor or dispensary and the signs of the disease, acute and rapidly spreading, are found. In many cases a near relative, a parent, brother or sister, is known to have died of the disease; in others, the examination of contacts reveals some member of the household to be acting as a "carrier," but frequently no possible source of infection is found. We are left in doubt whether a recent massive infection has overwhelmed the patient or whether an infection received in earlier life, lying dormant through the sheltered years of childhood, has broken out at a time when the strain

of life has suddenly increased, for it will be noted that Tuberculosis of the Lungs is prone to manifest itself when the strain of life begins or the vitality of life declines. One thing at least is obvious, the patients in this group have not acquired adequate resistance to tuberculous attack. A few acquire resistance during the course of the disease, and after a long struggle win their way back to a measure of health. But such a happy result is rarely attained, and while it is true that arrest of the disease may occur at any stage of its course, we should not be far from the truth in saying that the finding of the tubercle bacillus in the spit of a young person of the industrial class is almost equivalent to a sentence of death.

The statement frequently made that consumption is incurable is patently untrue if applied to Tuberculosis in general. If applied to the type of disease we are now considering it is not far from the truth, and though in a few cases the early adoption of the open-air life may just suffice to turn the scale and lead to arrest, in most instances sanatoria can only delay the inevitable end or hospital treatment palliate the sufferings of the dying.

It is the fact that Tuberculosis exhibits so great a variety of types that has made it a happy hunting ground for the quack who plays upon the fears of those who are not suffering from it, effects "cures" in those whose resistance is good and who are in no serious danger, and raises cruel expectations among those whose days are numbered. Occasionally, even in the group we have been discussing, sanatoria treatment or some unknown factor increases the resistance of the patient before the disease has progressed very far, and healing results. In a few instances, the attack proves abortive. Surgical treatment of the lungs (*e.g.*, artificial pneumo-thorax) yields excellent results in the limited number of cases suitable for treatment of this kind. Sanatoria are valuable allies to patients whose resistance is lowered. But we are still searching for some means of creating resistance in those who do not possess this power of response to tuberculous invasion. Till this is found it is probable that the credulous will continue to herald the arrival of "specific cures," whether emanating from the laboratory of the research worker or springing like Minerva, fully matured at birth, from the brain of the philanthropist whose welcoming right hand extends an infallible cure while his more reticent left conceals a cash box. Nor is the apparent success of these May-fly specifics, born at sunrise and dead at sundown, wholly illusory. The mind of the tuberculous intoxicated by the subtle poisons which the bacillus supplies, is peculiarly susceptible to suggestion. The flagging body does respond for a brief period to the exciting stimulus of a new hope. Unhappily, such improvement is apt to be as short lived as the career of the remedy.

The exploitation of suggestion by the quack who preys on suffering for his personal gain is shameful. But the power of suggestion rightly employed is not to be despised. There are dispensaries whose dreary aspect must exercise a depressing effect on both doctor and patient. The outward expression of a sanatorium, like that of a gloomy physician may suggest a hopeless prognosis. A cheerful scheme of decoration may be an effective aid to treatment.

The forms of Tuberculosis termed "surgical" which attack bones and joints, glands and skin, are relatively benign. Disease of this type is, as a rule, obvious from the start, and modern methods of treatment yield brilliant results. Moreover, infection of this kind is usually met by a stubborn resistance on the part of the tissues attacked. It is therefore not surprising that Pulmonary Tuberculosis is a very rare complication in this group.

In the light of the above facts, it is clear that the most important part of our Anti-Tuberculosis Scheme is that which concerns childhood. Let us consider, briefly, whether our schemes are well and truly laid.

(*a*) Infants must be protected from infection. Under the Grancher System in France, the children of tuberculous parents suffering from active disease are removed from their infectious relative and "boarded out" in the country. Tuberculosis is not a hereditary disease, and such children once removed from the source of danger are no more liable to develop Tuberculosis than others from healthy families. It would be impossible to carry out this system without legal powers. The question whether compassion for maternal feelings should be permitted to outweigh grave danger to a child's life need not be discussed here. Maternity and Child Welfare Centres should, however, keep lists of all women suffering from active Pulmonary Tuberculosis who are in charge of children and their homes should be visited every week. There is also need for further instruction to be given on the subject of tuberculous infection. As the result of a couple of generations of propaganda, the public does now at last appreciate that Tuberculosis is an infectious disease. But the pendulum has swung too far, and a person who with more or less reason has been labelled tuberculous is in danger of being treated as a pariah. Parents should be taught that children are in danger of infection from two sources, and from only two sources—from infected milk and from the company of persons whose spit contains tubercle bacilli. All their attention and care should be concentrated on these two points. At present, fear is widespread and bewilderment often leads to ineffective action. Even the active consumptive is comparatively harmless if his habits are cleanly.

(*b*) The "pre-tuberculous" child is in no danger of suffering from lack of observation. Unfortunately, dispensary observation is not curative, and our provision for treatment in open-air schools and children's sanatoria is inadequate. The proper place for a child suspected of harbouring tubercle bacilli but not exhibiting any signs of definite disease is the open-air school. There are 130,000 children in the elementary schools of Essex and the residential accommodation in open-air schools for delicate children is limited to 12 beds at the Ogilvie Home. The child who aspires to Ogilvie should be something of an optimist. For children who, in the opinion of the Tuberculosis Officers are under more definite suspicion of tuberculous infection, there are 31 beds at Sible Hedingham Sanatorium. The work done here is valuable, and many children have recovered health in this pleasant holiday home.

As a "preventorium," it merits the good reputation it has gained, but an institution where there is no Resident Medical Officer, where there is no X-ray installation and where there are no facilities for carrying out pathological work, obviously does not provide for the proper investigation of Tuberculosis. The East Anglian Children's Sanatorium provided accommodation for 37 Essex children during the year, while 13 Essex boys were under treatment at the Church Army Sanatorium at Farnham. These institutions are excellent, and the County is indebted to the responsible authorities for permission to make use of them. It is, however, not very satisfactory to send children so far from their homes.

(*c*) Children suffering from definite "Consumption" are provided for at the East Anglian Children's Sanatorium, or if over the age of 14 years at one of the County Sanatoria. The total known number of such cases in children of 14 years of age and under, in which the diagnosis has been confirmed bacteriologically was only 23 in the whole County in 1926, out of a total child population of some 200,000.

(*d*) Children suffering from "Surgical Tuberculosis" are admitted to High Beech where preference is given to those with bone and joint disease. Admirable work is being done at this institution, but despite the fact that many children are treated at outside institutions there is always a waiting list, and the number of beds is inadequate to meet the needs of the County.

Is it possible to take any steps to anticipate the scourge of "Consumption" in adolescence and early adult life? The steps already taken to safeguard the "pre-tuberculous" are, as already indicated, ineffective to reduce the tragic toll that this type of Tuberculosis takes of the young life of the country. The warning signs which enable us to take preventive measures in the former group are lacking in the latter. The problem is one of extreme difficulty and urgency. No satisfactory solution has yet been found, but certain precautions might be taken.

It was formerly the custom to attach to the School Medical Inspection Card of children marked as special cases an additional pink card giving details of special defects. In order to simplify records and reduce clerical work the special cards were abandoned some years ago. The ordinary medical inspection cards are so crowded with details that there is no space left for the adequate record of any specially important circumstances bearing on the child's health. In order to concentrate attention on the need for a more careful watch over certain children, special cards similar to those formerly in use might well be employed in the following cases :—

(i) For a child known to have lived in contact with a case of "open Tuberculosis," *i.e.*, one whose expectoration contains tubercle bacilli. Proof of this could usually be obtained from the local Tuberculosis Officer.

(ii) For a child known to have suffered from tuberculous disease of any kind.

(iii) For the child believed to have had "a primary infection," *i.e.*, a pre-tuberculous child.

(iv) For a child whose appearance suggests the type of constitution usually associated with a low resistance to tuberculous infection.

In each case the reason why a special card had been given would be clearly stated.

On leaving school a child's special card would be detached from the school records and sent to the Tuberculosis Department at Chelmsford, where it would be available for reference in the event of Tuberculosis developing at a later date. Such records would provide a valuable basis for research while leading to closer observation and earlier diagnosis of adolescent phthisis.

W. B. WOOD,
May, 1927.

TABLE XXI.

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

YEAR.	Pulmonary Tuberculosis.				Non-Pulmonary Tuberculosis.				Tuberculosis (All Forms).			
	Notifications.	Rate per 1,000 Pop.	Deaths.	Rate per 1,000 Pop.	Notifications.	Rate per 1,000 Pop.	Deaths.	Rate per 1,000 Pop.	Notifications.	Rate per 1,000 Pop.	Deaths.	Rate per 1,000 Pop.
1921-25	1131	1·21	666	0·71	307	0·32	153	0·16	1439	1·54	818	0·87
1925	1257	1·30	690	0·72	429	0·44	149	0·15	1686	1·74	839	0·87
1926	1240	1·25	616	0·62	359	0·36	141	0·14	1599	1·61	757	0·76

PART III.

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

(1) County Area. During the year 1926 the County Council were responsible for administering the above Acts in the following 28 Sanitary Districts :—

Sanitary Districts.	Acreage	Population, 1921.	No. of Births notified by		No. of Births Unnotified.	Deaths of Infants under 1 year.	Deaths of Mothers	No. of Notifications of	
			Midwives.	Doctors and Parents.				Puerperal Fever.	Ophthalmia Neonatorum.
Maldon B.	3,028	6,590	29	70	..	7	...	...	2
Saffron Walden B. ...	7,502	5,874	17	37	...	3	1	1	..
Braintree U.	2,224	6,970	77	26	..	2	...	...	...
Brentwood U. ...	460	6,853	58	56	2	6	...	...	...
Brightlingsea U. ...	2,867	4,500	...	56	...	1	...	...	...
Burnham-on-Crouch U. ...	4,517	3,434	...	48	...	2	...	...	...
Canvey Island U. ...	4,400	1,795	22	30	...	4	...	...	...
Chingford U.	2,808	9,482	48	134	38	10	1	1	...
Epping U.	1,420	4,196	21	56	5	3	..	...	...
Frinton-on-Sea U. ...	422	3,032	..	16	...	1	...	...	...
Halstead U.	647	5,923	32	45	...	4	...	...	...
Shoeburyness U. ...	1,036	6,413	84	37	3	6	1	...	2
Walton-on-the-Naze U. ...	2,046	3,664	...	33	.	1	...	...	...
Witham U.	3,713	3,717	42	37	...	2	...	...	...
Wivenhoe U.	1,564	2,329	16	13	3	2	...	1	...
Belchamp R.	26,500	4,219	29	44	1	.	...	...	...
Billericay R.	49,394	24,211	327	178	25	30	5	4	2
Braintree R.	62,349	18,779	113	129	..	6	...	...	...
Bumpstead R. ...	11,874	2,376	33	9	...	3	1	.	.
Dunmow R.	73,503	15,352	88	106	21	9	2	..	...
Epping R.	59,055	14,625	139	68	17	12	1	...	...
Halstead R.	38,712	9,743	29	77	...	5	...	...	...
*Maldon R.	82,342	16,479	84	64	5	12	1	1	2
Ongar R.	47,236	10,054	44	114	23	13	...	...	1
Rochford R.	50,603	21,068	222	343	12	34	1	...	2
Saffron Walden R. ...	59,975	10,087	76	32	.	6	1	...	...
Stansted R.	22,954	6,828	57	37	10	2	1	...	...
Tendring R.	73,131	21,721	205	226	3	16	..	1	...
Totals	676,282	250,314	1,892	2,127	168	202	16	9	11

*From 1st April, 1926.

The Ministry of Health issued an Order, dated 19th January, 1926, making the County Council the Authority under the Notification of Births Acts in the Maldon Rural District, to take effect from 1st April, 1926.

TABLE XXII.

SHEWING SUMMARY OF CHILD WELFARE WORK CARRIED OUT BY EACH HEALTH VISITOR AND DISTRICT NURSE-MIDWIFE.

Nursing Area. Districts.	Notifications received. Live Births.	Still Births.	H.Vs. No of Visits. Pre-Natal.	Post-Natal.	D.N.Ms. No. of Visits. Pre-Natal.	Post-Natal.	Total Visits. Pre-Natal.	Post-Natal.
Saffron Walden B. & R.	155	7	2	90	676	1483	678	1573
Bumpstead & North Halstead & Belchamp R.	114	4	91	1493	552	1236	643	2729
Halstead U. & South Halstead & Belchamp R.	173	7	35	966	273	625	308	1591
Wivenhoe U.	29	—	34	210	187	357	221	567
Tendring West & Brightlingsea U.	250	7	35	987	503	1955	538	2942
Tendring East & Frinton U.	238	8	39	990	269	362	308	1352
Walton-on-Naze U. (part-time H.V.)	33	—	65	759	—	—	65	759
Stansted & Dunmow (S.W.)	116	3	10	228	494	1196	504	1424
Dunmow (part)	160	9	5	205	818	1395	823	1600
Braintree U. & R. (North)	168	7	38	677	1011	1218	1049	1895
Braintree R. (South) & Witham U.	246	3	15	1194	499	727	514	1921
Epping U. & R. (part)	248	10	—	294	1120	1469	1120	1763
Ongar Rural	156	2	155	1070	204	382	359	1452
*Burnham U. & Maldon R. (South)	79	4	—	260	146	408	146	668
*Maldon B. & Maldon R. (S.W.)	129	2	13	653	—	—	13	653
*Maldon R. (North)	77	4	6	278	144	158	150	436
Chingford U.	176	6	21	590	—	—	21	590
Chigwell Parish	25	1	3	142	78	127	81	269
Brentwood U. & part Billericay R.	232	9	24	442	419	345	443	787
Billericay R. (part)	293	12	5	1154	397	662	402	1816
Rochford R. & Shoeburyness U.	424	18	82	2378	554	827	636	3205
Rochford R., Canvey Island U. and Billericay (part)	359	16	60	1567	211	231	271	1798
Totals	3880	139	738	16627	8555	15163	9293	31790

*Maldon Rural as and from 1st April, 1926.

The Health Visitor for Burnham Urban and Maldon Rural South-East was away three months on account of accident, and the Health Visitor for Chingford was granted leave of absence for the last three months of the year.

On 8th December, 1926, an Order was issued under which the County Council was made the Notification of Births Acts Authority in the Urban Districts of Hornchurch and West Mersea and the Rural District of Romford, this Order to operate from 1st January, 1927.

The County Council is not the Authority under the Notification of Births Acts in the Rural Districts of Chelmsford, Lexden and Winstree and Orsett, nor in the following Urban Districts which are not autonomous Part III. Education areas :— Buckhurst Hill, Clacton-on-Sea, Dagenham, Grays, Loughton, Romford, Tilbury, Waltham Holy Cross, Wanstead and Woodford.

(2) Medical Service. On 6th October, 1926, the Medical Staff was augmented by the appointment of Dr. William Harvey, as additional Assistant County Medical Officer for the Brentwood, Billericay and Ongar Districts, his duties to include those of Child Welfare Medical Officer for that area.

In connection with the Scheme for the treatment of orthopædic patients (non-tubercular), arrangements were made for the attendance of an Orthopædic Surgeon at Clinics for an experimental period of 12 months from October, 1926, at £3 3s. per session plus travelling expenses.

Reference is made on page 70 of this report to the new Regulations which came into operation on 1st October, 1926, regarding the notification of Puerperal Fever and Puerperal Pyrexia. The County Council in 1927, agreed to the appointment of an Obstetric Specialist to attend a limited number of cases, the total fees not to exceed £105 plus travelling expenses, for an experimental period of 12 months.

(3) Nursing Service. On 31st December, 1926, the number of Health Visitors carrying out Maternity and Child Welfare duties was as follows :—

Whole-time (also undertaking School and Tuberculosis work)	...	20
Part-time („ „ „ „)	...	2

The District Nurse-midwives continue to assist the Health Visitors in the supervision of the health of mothers and children.

A summary of work carried out by the Health Visitors and District Nurse-midwives during the 12 months ended 31st December, 1926, is given in Table XXII.

(4) Child Welfare Centres. The following Table shows the Child Welfare Centres receiving maintenance grants from the County Council under the "Objects and Conditions" laid down by the County Council and adopted by the Local Voluntary Committees in charge of the Centres :—

TABLE XXIII.

Name and Address of Centre.	Approximate population served.	Sessions.	Total attendances of infants and children in 1926.	Medical Officer.
Abridge, Parish Room ...	1244	Alternate Wednesdays	449	E. U. Vawdrey.
Billericay, Women's Institute Hall	4000	2nd and 4th Tuesdays	712	W. Harvey.
Bocking, Village Hall... ..	2000	2nd and 4th Thursdays	387	M. D. Rankine.
Braintree, Congregational Chapel, London Road	6970	Tuesdays	1486	M. D. Rankine.
Brentwood, Congregational Sunday Schools, South Street	6853	Alternate Fridays ...	1145	W. Harvey.
Brightlingsea, New Church Schools	4500	1st and 3rd Wednesdays	397	W. A. Milne.
Brook Street (South Weald), Village Hall	2000	1st and 3rd Tuesdays ..	174	W. Harvey.
Canvey Island, Whitter Hall ..	4000	3rd Wednesdays ...	260	N. S. R. Lorraine.
Chingford (South) Hampton Road Congregational Church Rooms	6000	Tuesdays	791	M. Barker.
Chingford (North). 6, King's Road (Opened November, 1926)	6000	Thursdays... ...	156	M. Barker.
Debden, Memorial Hall ...	1214	4th Wednesdays ...	282	S. R. Richardson.
Earls Colne, Village Hall ...	2732	1st and 3rd Wednesdays	272	J. S. Ranson.
Epping, Women's Institute Hall, St. John's Road	4196	Tuesdays	1646	A. Watney.
Hadleigh, Church School ...	2246	1st and 3rd Tuesdays...	732	N. S. R. Lorraine.
Halstead, Technical School ...	5923	2nd and 4th Thursdays	630	J. S. Ranson.
Harlow, Women's Institute Club...	3200	2nd Fridays ...	134	M. Gazdar.
Hatfield Heath, Men's Institute ...	1564	4th Fridays ...	164	M. Gazdar.
Hatfield Peverel, Village Hall ...	1600	1st and 3rd Thursdays	472	M. D. Rankine.
Heybridge, Waring Hall (Under County Council Scheme, April, 1926)	2200	2nd Fridays	161	M. D. Rankine.
Laindon, Manor Hall ...	3000	2nd and 4th Wednesdays	423	W. Harvey.
Maldon, Progressive Club ...	6590	Fridays	1005	M. D. Rankine.
Matching Tye, Women's Institute Hall	500	3rd Fridays ...	137	M. Gazdar.
Parkeston, Weeley Schoolroom, Garland Road, (Opened May, 1926)	2000	Alternate Tuesdays ...	240	J. Ramsbottom.
Ramsden Heath, Club Room, Leslie Cottage, Downham	1342	1st Thursdays ...	206	W. Harvey.
Rochford, Congregational Rooms	5076	2nd and 4th Mondays	?	N. S. R. Lorraine.
Saffron Walden, Central Hall, High Street	5874	Fridays	?	S. R. Richardson.
Sheering, Parish Room ...	778	1st Fridays ...	93	M. Gazdar.
Shoeburyness, Council Offices ..	6413	1st and 3rd Thursdays	557	N. S. R. Lorraine.
Sible Hedingham, Assembly Hall, Sible Hedingham	2723	1st Tuesdays ...	572	J. S. Ranson.
,, Women's Institute, Castle Hedingham		3rd Tuesdays ...		
Stansted, Central Hall ...	3184	1st and 3rd Wednesdays	708	S. R. Richardson.
Steeple Bumpstead, Lecture Hall	1784	1st and 3rd Wednesdays	127	J. S. Ranson.
Theydon Bois, Sorrell Room	1267	Fridays	456	W. F. Erskine.
Thundersley, Church Schools ...	1972	1st and 3rd Fridays ...	608	N. S. R. Lorraine.
Tollesbury, Parish Room, (Under County Council, April, 1926)	1721	2nd Mondays ...	163	M. D. Rankine.
Great Wakering, Village Hall ...	2584	2nd and 4th Thursdays	485	N. S. R. Lorraine.
Warley, Parochial Hall, Brentwood	5974	Alternate Fridays ...	1168	W. Harvey.
Wickford, Mission Hall ..	2000	Last Monday in month	229	W. Harvey.
Witham, Church House, Collingwood Road	3717	2nd & 4th Wednesdays	320	M. D. Rankine.
Weeley, Public Health Offices (Opened November, 1926)	4000	1st and 3rd Fridays ...	21	J. Ramsbottom.

As indicated in the foregoing Table, new Centres were opened at North Chingford, Parkeston and Weeley. Heybridge and Tollesbury Centres were also included in the scheme when the County Council became the Notification of Births Acts Authority in the Maldon Rural District.

For particulars regarding Combined Treatment Centres, see page 39 of this report.

(5) Provision of Milk. The two schemes outlined in the report for the year 1922, for the Provision of Milk (*a*) for districts served by Centres, and (*b*) for districts not served by Centres were continued during the year.

(a) *Districts served by Child Welfare Centres.* The total amount claimed from the County Council by Child Welfare Centres was £250 11s., representing assistance to 160 families.

(b) *Districts not served by Centres.* Under this scheme 147 mothers and 83 infants were granted supplies of cows' milk and dried milk for varying periods, free of charge, at a total cost of approximately £367 19s. 4d.

Dried milk was also supplied, at cost price, to Child Welfare Centres, and persons recommended by the Health Visitor.

(6) Dental Scheme. An outline of the Dental Scheme was given in the last report. This was adopted in September, 1926, by the following Child Welfare Centres who were allowed a grant of not exceeding £10 to form a moiety of the net expenditure for the year ended 31st March, 1927 :—Braintree, Brightlingsea, Chingford, Epping, Great Wakering, Hatfield Peverel, Maldon, Shoeburyness, Stansted, Theydon Bois, Witham and Rochford. The Brentwood Centre was allowed a grant of not exceeding £3 for the same period.

Up to the end of December, 1926, claims were received from the undermentioned Centres, and the amounts indicated were paid by the County Council :—

	£	s.	d.		£	s.	d.
Braintree... ..	1	12	9	Stansted	0	14	9
Hatfield Peverel ...	1	8	9	Witham	0	5	3

(7) Home Helps. The County Council made the following resolution in connection with the provision of home helps :—

> "That during the year ended 31st March, 1927, the Committee be authorised to consider representations made to them by the Voluntary Committees of the Brightlingsea, Chingford, Harlow, Laindon, Sheering and Witham Child Welfare Centres that the provision of home helps within the

districts of such Centres is necessary, and to make grants of not exceeding £5 to each Centre towards the payment of a moiety of the cost of the provision of home helps employed in necessitous cases with the approval of the Committee."

This scheme commenced in September, 1926, but no applications were received during the year.

(8) Public Health (Ophthalmia Neonatorum) Regulations, 1926. These Regulations came into operation on 1st October, 1926. Under Regulations issued in 1914 the onus of notifying cases of Ophthalmia Neonatorum to the local Medical Officer of Health rested upon both Medical Practitioners and Certified Midwives. On and after 1st October, 1926, the duty to notify such cases rested solely upon the Medical Practitioner who is in professional attendance on the case. Further, the local Medical Officer of Health must forward a copy of such notification to the County Medical Officer within 24 hours after the receipt of the notification. A midwife continues as before to carry out the rules of the Central Midwives Board in respect to calling in medical aid.

In Circular 617A, dated 9th August, 1926, the Ministry of Health state that "whilst prevention of the occurrence of Ophthalmia Neonatorum should be the first "aim, adequate provision should be made for such cases of this disease as occur by "visiting and nursing in the home and by hospital treatment where necessary; and "the Minister is of opinion that the appropriate Authority to carry out these "measures is the one entrusted with the scheme for Maternity and Child Welfare in "the district."

In regard to hospital treatment, at the time of writing the County Council have authorised the County Medical Officer to make arrangements for a limited number of patients from the County Maternity and Child Welfare area to receive institutional treatment at a cost of not exceeding 1½ guineas per week for treatment of children or not exceeding 3 guineas per week where accommodation for the mother as well as the child is necessary.

The County Council are arranging with the Essex County Nursing Association for the provision of skilled nursing in the homes of patients.

Paragraph 7 of the Ministry's Circular 617A, refers to the objections of parents to the midwife summoning medical aid for this disease if the Local Supervising Authority attempt to recover the fee and in consequence some midwives are reluctant to call in medical help for this condition. In view of the need for prompt medical assistance in such cases, the Ministry of Health "suggest that Local Supervising Authorities should consider whether they should not refrain in future from exercising their power of recovery."

Consideration was given to the matter and it was decided not to reclaim from parents fees paid to a doctor under the Midwives Act, 1918, in regard to attendance on an infant for inflammation of, or discharge from, the eyes.

(9) Public Health (Notification of Puerperal Fever and Pyrexia) Regulations, 1926. These Regulations came into operation on 1st October, 1926. It is agreed, generally, that in the past many cases of Puerperal Fever have not been notified to the local Medical Officer of Health. Accordingly, the Ministry of Health have now included Puerperal Pyrexia in the list of notifiable diseases. Copies of notifications of these two diseases must be sent by the local Medical Officer of Health to the County Medical Officer within 24 hours after the receipt of the notification. The notification form requires the medical attendant to state whether he desires (i) to have a second opinion on the case, (ii) to have a bacteriological examination of lochia or blood, (iii) that the patient be admitted to hospital, (iv) that trained nurses be provided, or whether facilities are available for all necessary treatment.

By Circular 722, the Ministry suggest that these facilities (i. to iv.) can most readily be provided by the Local Authorities which are administering schemes under the Maternity and Child Welfare Act, 1918.

The chief effect of the new regulations on the department is in connection with the provision of "facilities for assistance in diagnosis and for the treatment of patients who are not able to secure adequate treatment for themselves."

As indicated on page 66, the County Council has decided to appoint an obstetric specialist.

Laboratory facilities are already provided.

With reference to hospital treatment, the County Council have authorised the County Medical Officer to make arrangements for a limited number of suitable patients to be admitted to Institutions willing to receive them, the cost not to exceed £3 3s. per week per patient.

As regards skilled nursing, arrangements are being made with the Essex County Nursing Association for this provision.

(10) Hospital Treatment for Maternity Patients. The arrangements for hospital treatment of maternity patients referred to in previous reports were continued and five patients were treated in 1926.

In December, 1926, a letter was addressed to 13 Poor Law Institutions, 20 Isolation Hospitals and various Voluntary Hospitals with a view to ascertaining the facilities available for complicated confinements, patients suffering from Puerperal Fever and Pyrexia and from Ophthalmia Neonatorum.

The results were as follows. (This includes existing arrangements between the County Council and certain hospitals) :—

TABLE XXIV.

Hospital.	Confinements per patient per week.	Puerperal Fever and Pyrexia cases per patient per week.	Ophthalmia Neonatorum per patient per week.
Essex Hospitals—			
Essex County Hospital, Colchester.	£2 15s. and £2 2s. surgeon's fee per patient.	£2 15s. and £2 2s. surgeon's fee per patient.	No accommodation.
Queen Mary's Hospital, Stratford.	7s. per day. Hospital recover maternity benefit.	7s. per day. Hospital recover maternity benefit.	No accommodation.
Chelmsford & Essex Hospital.	£1 1s.	£3 3s.	£1 1s.
Witham Maternity Ward	5s. per day. £1 1s. midwifery fee.	—	—
Braintree Cottage Hospital.	£5 5s.	£5 5s.	No accommodation.
Orsett Infirmary	About 30s.	No accommodation.	About 30s. Accommodation for mothers.
Romford Infirmary	£2 11s. 4d. (£3 3s. for private patients).	£2 11s. 4d.	£2 11s. 4d.
Billericay Infirmary	£2 12s. 6d.	No accommodation.	£2 12s. 6d. No accommodation for mothers.
Billericay Isolation Hospital.	No accommodation.	£2 12s. 6d.	No accommodation.
Romford Isolation Hospital.	—	£2 5s. plus 1s. 6d. per mile for ambulance, Uncomplicated cases.	£2 5s. plus 1s. 6d. per mile for ambulance, accommodation for mothers.
Ipswich Hospitals—			
Ipswich Maternity Home	£3 3s.	—	—
Ipswich Isolation Hospital.	—	£3 3s. with additional charges for service.	£3 3s. plus extra charge for mothers.

As already indicated, the County Council have authorised the County Medical Officer to make arrangements for hospital treatment on the following terms :—

(*a*) Not exceeding one-and-half guineas per week for treatment of children,

(*b*) Not exceeding three guineas per week for complicated pregnancies and confinements or accommodation of mother and child.

With regard to children suffering from crippling defects, the Public Health and Education Committees have delegated this work to the Medical and Nursing Services Joint Sub-Committee with a view to a scheme being established for the treatment of children under 5 years of age where the County Council is the Authority under the Notification of Births Acts, and for children of school age in the County Education area. Reference is made on page 66 to the arrangements with an Orthopædic Surgeon for the holding of Orthopædic Clinics.

The following Table indicates the number of examinations of County Council patients made at Orthopædic Clinics during the year 1926, the number who received hospital treatment during the year, and the number who were recommended hospital treatment at the end of 1926 :—

TABLE XXV.

No. of Cripples examined.		No. who received Hospital Treatment, 1926.		No. recommended for Hospital Treatment at the end of 1926.	
School.	C.W.	School.	C.W.	School.	C.W.
224	31	27	11	60	3

MIDWIVES AND MATERNITY HOMES ACTS, 1902-1926.

(*a*) Midwives and Maternity Homes Act, 1926. Part I. of this Act came into operation on 4th August, 1926, making certain amendments to the Midwives Acts, 1902 and 1918, which include the following :—

i. It is no longer necessary, in order to secure a conviction against an uncertified woman for attending maternity patients in the capacity of a certified midwife, to prove she attends "habitually and for gain." The "personal supervision" as well as the "direction" of a qualified medical practitioner is now necessary if an uncertified person attends a woman in child-birth. Male persons, as well as uncertified women, are now brought within the scope of the enactment.

ii. A certified midwife who is suspended from practice (not being herself in default) in order to prevent the spread of infection, has now a right to recover reasonable compensation from the Local Supervising Authority.

iii. A Local Supervising Authority is empowered, with the approval of the Ministry of Health, to make arrangements whereby an expectant mother can by the prior payment of an agreed sum, insure against liability for the payment of a doctor's fee under the 1918 Act.

iv. All claims made by medical practitioners under the Act of 1918 must be submitted to the Local Supervising Authority within two months from the date on which the doctor is called in by the midwife.

Part II. of the new Act operates from the 1st January, 1927, and makes it an offence for any person, on and after that date, to carry on a Maternity Home unless registered in respect of that Home by the Local Supervising Authority.

> The expression "Maternity Home" means any premises used or intended to be used for the reception of pregnant women or of women immediately after child-birth, but shall not include any hospital or other premises maintained or controlled by a Government Department or Local Authority, or by any other body or persons constituted by special Act of Parliament or incorporated by Royal Charter.
>
> The Local Supervising Authority are empowered to make Bye-laws with respect to the records to be kept of patients received into and children born into the Home, and also to appoint an officer to inspect the Home and any records kept.

The County Council has adopted the model bye-laws of the Ministry of Health.

(*b*) Practising Midwives. During the year under review, 348 midwives notified their intention to practise in the Administrative County. Of these, 299 were actually in practice at the end of the year 1926. These midwives are classified as follows :—

Total No. of Midwives in practice at end of year.	Trained.		*Bona-fide*, including untrained and L.O.S. Certificated.
	Dependent.	Independent.	
299	158	115	26

The total number of births which occurred during the year 1926 in the Administrative County was 16,743, and of these, 7,263 (44·03 per cent.) were attended by midwives in the capacity of a midwife, and 2,536 (15·14 per cent.) as maternity nurses under the supervision of medical practitioners.

Each midwife was asked to state the number of confinement cases which she attended as a midwife during the year 1926, and it was found that 128 trained and 10 *bona-fide* midwives attended 10 or less cases each ; 60 trained and 3 *bona-fide* attended 11—20 cases each ; 27 trained and 4 *bona-fide* attended 21—40 cases each ; 14 trained and 3 *bona-fide*, 41—60 cases each ; 12 trained and 5 *bona-fide*, 61—100 cases each, and 9 trained and 1 *bona-fide* midwives attended over 100 cases each. These figures do not include cases attended in maternity homes at Leytonstone, Ilford, Walthamstow and Barking (23 midwives).

Reports were received regarding 14 cases of confinement attended by eight women, who were not certified, and who acted as midwives without being under the direct supervision of a doctor. Particulars were sent to the Clerk of the Council for any necessary action.

(*c*) Notifications. The following list shows the number of notifications received from Certified Midwives in accordance with the rules of the Central Midwives Board during the year as compared with the previous four years :—

	1922.	1923.	1924.	1925.	1926.
Records of Medical Aid... ..	1030 ...	1025 ...	1144 ...	1309 ...	1492
Records of Still-birth	108 ...	109 ...	100 ..	124 ...	127
Deaths of Mothers	3 ...	1 ...	*10 ...	*6 ...	*2
Deaths of Infants	11 ...	5 ...	*33 ...	*47 ...	*54
Artificial Feeding	35 ...	43 ...	54 ...	75 ...	62
Liability to be a Source of Infection	41 ..	37 . .	58 ...	49 ...	86
Laying-out for Burial	129 ...	181 ...	180 ...	229 ...	256
Ophthalmia Neonatorum or Discharging Eyes	84 ...	71 ...	62 ...	89 ...	112

*In accordance with the revised Rule E. 22 (1) (*b*) a certified midwife when acting as a midwife must, on and after 1st January, 1924, notify the death of a mother or child whether a doctor is in attendance at the time of death or not. Hence the increased number of notifications since 1924, as compared with previous years.

The 1492 cases (20·5 per cent.) where midwives sought the assistance of doctors, were for various reasons, namely :—

Albuminuria	16 cases.	Phimosis	5 cases.
Contracted Pelvis ...	3 ,,	Phlebitis	3 ,,
Dangerous Feebleness of Infant	39 ,,	Placenta Adherent ...	68 ,,
Eclampsia	4 ,,	Placenta Prævia ...	8 ,,
Hæmorrhage :—		Premature Birth ...	47 ,,
Ante-partum ...	48 ,,	Prolonged Labour ...	208 ,,
Post-partum ...	46 ,,	Presentation (abnormal) ...	110 ,,
Hydramnios	3 ,,	Pyrexia (High Temp.) ...	71 ,,
Instrumental Assistance ...	5 ,,	Ruptured Perineum ...	298 ,,
Malformation of Child ...	13 ,,	Spina Bifida	2 ,,
Miscarriage, Abortion ...	78 ,,	Thrombosis	1 ,,
Miscellaneous Causes ...	261 ,,	Uterine Inertia ...	36 ,,
Ophthalmia Neonatorum or Discharging eyes ...	112 ,,	Pemphigus Neonatorum ...	7 ,,

Puerperal Fever and Ophthalmia Neonatorum.

Special investigations were made into all cases of high temperature of mother and discharging eyes of infant in a midwife's practice. The results of these investigations showed that during 1926, in ten cases of Discharging Eyes, the rules of the Central Midwives Board were not properly carried out, and letters of caution were sent to the midwives concerned. In one case of high temperature the midwife's conduct was reported to the Central Midwives Board for neglect in calling in medical assistance and taking pulse and temperature. The Board decided that in order to give the midwife an opportunity of proving amendment the Local Supervising Authority be asked to report at the end of three months and again at the end of six months on her conduct and mode of practice.

The new Regulations referred to on page 70 came into operation on 1st October, 1926, and for the quarter ended 31st December, 1926, copies of notifications made by medical practitioners were received from the Medical Officers of Health in the Administrative County as follows :—

Puerperal Fever	11
Puerperal Pyrexia	34
Ophthalmia Neonatorum	24

Pemphigus Neonatorum.

As indicated in the previous year's report, all suspected cases of Pemphigus occurring in a midwife's practice are investigated with a view to seeing that all possible precautions are taken to prevent a spread of the disease.

Enquiries were made into 16 cases, of which 12 were considered to be Pemphigus, *i.e.*, Tilbury 10, Pitsea 1, Walthamstow 1.

The only serious outbreak was in the Urban District of Tilbury, ten cases occurring between August, 1926, and January, 1927. Eight of these occurred in one midwife's practice, and two in the practice of another midwife. In four of the eight patients referred to, the symptoms occurred after the midwife had ceased attendance.

The Combined Medical Officer for the district fully enquired into each case, but in spite of all precautions being taken in regard to disinfection of the first case reported, other cases followed. The midwife who had most of the cases was interviewed by the Chairman of the Maternity and Child Welfare Sub-Committee and cautioned in respect to one patient where she had not called in medical assistance as soon as the slightest symptom had manifested itself.

Inspection Visits.

Nine hundred and thirty-seven (937) routine visits were made to midwives during the year, and of these 582 were undertaken by Assistant County Medical Officers and 355 by the Chief Health Nurse.

Written cautions were sent to 13 midwives for minor infringements of the Rules.

Doctors' Fees.

In accordance with the Midwives Act, 1918, during the year ended 31st December, 1926, the County Council paid the sum of £1,323 2s. 3d. as fees to medical practitioners and recovered from patients during the year the sum of £341 16s. 9d.

The following comparative Table is of interest, shewing (*a*) the number of medical aid notices received from midwives during the past five years, and (*b*) the corresponding number of doctors' claims made against the County Council in respect of such notices. This Table shows that the numbers are increasing :—

Year.	No. of Medical Aid Notices received from Midwives.	Percentage of Confinements.	No. of Medical Aid Notices for which Doctors' claim have been received.	Total amounts of claims.			Amounts recovered from parents.		
				£	s.	d.	£	s.	d.
1922	1,030	17·0	463	769	4	6	195	18	0
1923	1,025	14·6	585	829	19	3	196	18	10
1924	1,144	17·8	592	999	2	9	204	18	5
1925	1,309	18·5	665	1,031	15	6	293	4	8
1926	1,492	20·5	789	1,323	2	3	341	16	9

Lectures to Midwives.

In addition to the syllabus of lectures arranged at the usual Centres in the County by the Essex Midwives Association, a special course of lectures in Chelmsford was arranged for April, 1927. Dr. Mary Blair gave the lectures as follows, which were greatly appreciated by the 60 to 70 midwives who attended each lecture :—

i. Ante-natal care—Diseases arising during pregnancy, viz.: Toxæmia, etc.
ii. Ante-natal care.—Conditions discoverable during pregnancy and affecting labour.
iii. Emergencies of labour.
iv. Feeding of the new-born infant.

Essex County Nursing Association.

(*a*) General. For the four quarters of the year 1926, the following grants were paid by the County Council to the County Nursing Association in accordance with the Agreement :—

	£	s.	d.
(*a*) Cost of training District Nurse-midwives	1,565	0	0
(*b*) Maintenance of two Emergency Nurses	200	0	0
(*c*) Grants to affiliated District Nursing Associations	4,830	18	3
(*d*) Equipping District Nurse-midwives for new areas	15	0	0
(*e*) Clerical and organising expenses	220	0	0
	£6,830	18	3

In connection with the Essex County Nursing Association's Training Home at Leytonstone, new buildings (necessary in order to qualify the home for recognition by the Ministry of Health as a Training School under the new Training of Midwives Regulations) were erected and alterations carried out during the year.

Owing to the increased length of training and additional expenditure entailed, the County Council agreed to revise their agreement with the Essex County Nursing Association as follows, to take effect from 1st January, 1927 :—

Clause 1. That the Association be required to give all suitable candidates referred to under Clause 1 of the agreement at least sixteen months' training.

Clause 7 (*a*). That the amount of the grants payable by the Council to the Association under Clause 7 (*a*) of the agreement be increased from £60 to £75.

Clause 7 (*c*). That, subject to the approval of the Ministry of Health, and to the maximum grants allowable by the Ministry not being exceeded, the grants under Clause 7 (*c*) of the agreement allocated to the District Nursing Associations be increased by £2 for each affiliated District Association, and that the Council do approve of that amount being retained by the Association for central expenses from the grant made to each affiliated District Association.

(*b*) District Nursing Associations. At the end of 1926 the number of District Nursing Associations in the Administrative County which were affiliated to the County Nursing Association and which employed 151 Nurses, was as follows :—

No. of affiliated D.N. Associations.		No. undertaking Midwifery and District Nursing.		No. performing District Nursing duties only.
141	...	124	...	17

A summary of the visits made by the District Nurses belonging to affiliated Associations during the past five years is given below :—

	1922.	1923.	1924.	1925.	1926.
Midwifery	22,165	24,729	23,742	28,468	25,721
Maternity	25,181	27,181	26,433	26,932	28,355
District General	167,782	161,492	164,607	179,412	185,296
,, Tuberculosis	2,647	3,009	4,232	4,374	4,526
Health Visiting	8,907	12,230	13,967	12,704 Pre-natal 15,631 Post-natal	13,813 Pre-natal 19,465 Post-natal
Home Visits (School Children)	3,494	4,839	5,970	7,830	7,525
Total number of visits	230,176	233,480	238,951	275,351	284,701

Of the 141 affiliated Associations, 129 participate in the County Council's Combined Nursing Scheme.

(*c*) Parishes Served :-

Number in the County (excluding Extra-Metropolitan Area)	377
Number served by affiiliated District Nursing Associations	297

The Chief Health Nurse (Miss D. M. Landon) has furnished the following report in connection with her duties during 1926 :—

On April 1st, 1926, the resignation of Miss Alice Tilbury took effect, and I was appointed County Superintendent by the Essex County Nursing Association with the approval of the County Council, for an experimental period of 12 months.

This revision of duties has resulted in my being able to exercise supervision from the time a pupil is selected to the time she is a fully qualified District Nurse-midwife. In October, 1926, the unfortunate illness and consequent resignation of Miss M. Thresh as Hon. Organising Secretary of the Association, necessitated my temporarily taking over her duties also. This, of course, has in some measure interfered with the supervisory work, chiefly on account of the increased administrative duties entailed.

Although it is desirable from the standpoint of economy and efficiency that the post of Chief Health Nurse and County Superintendent should be a combined one, the work in this County is now so extensive that it is impossible for one individual to carry out the duties adequately, and the question of appointing an assistant is at present receiving consideration by those concerned.

As in previous years, my work can be divided under four headings in connection with :—

1. Inspection of Midwives.
2. Health Visiting.
3. District Nursing Associations and Combined Nursing Scheme.
4. Lectures.

(1) Inspection of Midwives :—

Number of Routine Inspections	...	...	273
Number of Special Investigations	...	...	82

The ante-natal work still leaves much to be desired, as large numbers of the older midwives received little ante-natal instruction during training. Also, there is still a rooted prejudice against such work amongst many of the more ignorant mothers. There is, however, an improvement in this direction, and the new Central Midwives Board Rule will make it easier to insist on more adequate ante-natal supervision.

Otherwise, on the whole, the standard of midwifery amongst those whom I inspected is a high one. Of the 82 special investigations I made, only one was of a serious nature, and as elsewhere reported it had to be cited before the Central Midwives Board. I have visited this midwife constantly since, and she appears to be trying to do well, and I have no further cause of complaint.

(2) Health Visiting :—

Number of visits paid	...	...	85

In almost all cases the work of the Health Visitors has been conscientiously carried out, although the standard of work attained varies considerably in different areas. This I consider is due mainly to three factors :—

(1) The personality and teaching capacity of the Health Visitor herself.

(2) The varying degrees of co-operation between the officers employed in public health work and local Voluntary Committees, &c.

(3) The mentality of the people and appreciation of public health work which differs considerably in various parts of the County.

The question of transport in the scattered rural areas continues to be a difficulty, but the permission to take bicycles by 'bus and train has been appreciated by the Health Visitors.

The standard of cleanliness in the schools has greatly improved, and really dirty or verminous children are, I am glad to say, a rare occurrence.

(3) District Nursing Associations :—

Visits paid	260

Owing to reasons stated above, there is a decrease in the number of my routine visits, and I have not been able to spend so much time in supervising the practical work of the nurses on district, but I have no reason to believe that the standard of work is not as high as it has been in the past. Many of the younger nurses are really interested and anxious to undertake public health duties, and I think in some places they are disappointed that the Health Visitors do not utilise their services more, but in many cases they speak in warm terms of the advice and kindness shown them by the Health Visitors, and, on the whole, the co-operation is good.

(4) Lectures. These were on various health subjects, and were given at Women's Institutes, Annual Nursing Meetings, Child Welfare Centres, etc. There is, undoubtedly, an increasing interest in matters concerning health, and audiences usually ask intelligent questions afterwards and appear interested in the subject.

SANITARY CONVENIENCES ON PUBLIC HIGHWAYS, ETC.

Modern methods of transport have accentuated the need for the provision of sufficient sanitary accommodation at the numerous tea rooms, restaurants, hotels, etc. which have been and are being erected alongside many of the arterial roads in the County. Each summer finds increasing use of these roads by motor char-a-bancs which, particularly at week-ends, transport many hundreds and thousands of persons from London and suburbs to the country and seaside resorts on the south and east coasts of the County.

It is quite common to find nuisances bordering upon indecency being committed in close proximity to public highways, quite apart from the possible danger to the public health from the fouling of the ground in close proximity to portable tea rooms, stalls, etc.

In respect to the erection of new hotels, it is understood that the Justices, before granting licences for the sale of intoxicating liquors, require to be satisfied that adequate provision has been made for sanitary conveniences for both sexes. But as regards other places of refreshment, there appears to be little (if any) supervision by anyone, and unless the owner of such premises is sufficiently enterprising, not much is done to provide sanitary accommodation, particularly for women.

The existing powers of Local Sanitary Authorities are contained in the following Sections from the Public Health Act, 1875, and the Public Health Acts (Amendment) Act, 1907 :—

Public Health Act, 1875.

Section 39. Any Urban Authority may, if they think fit, provide and maintain, in proper and convenient situations, urinals, waterclosets, earth-closets, privies and ashpits and other similar conveniences for public accommodation.

Public Health Acts (Amendment) Act, 1907.

Section 47. The Local Authority may provide and maintain in proper and convenient situations sanitary conveniences in or under any street repairable by the inhabitants at large, and may provide and maintain in proper and convenient situations lavatories in or under such street for the use of the public, and may employ and pay attendants and make reasonable charges for the use of any sanitary conveniences (other than a urinal) or of any lavatory so provided. The Local Authority may make bye-laws for the management of the sanitary conveniences and lavatories, and as to the conduct of persons frequenting the same.

> The Local Authority may let any such sanitary conveniences and any such lavatories for such periods, at such rents, and subject to such conditions as to the charges to be made for the use thereof and otherwise, as they think proper.

It should be noted that the expression "Local Authority" in this Act means an Urban Sanitary Authority, an Urban District Council or a Rural District Council, and that any part or any section of the Act may be adopted by any of these Councils or Districts.

In March, 1927, at the request of the Public Health and Housing Committee, the Clerk of the Council addressed a letter to Urban and Rural Councils in the County enquiring whether nuisances have arisen in their districts due to the absence of sanitary conveniences at eating, and refreshment rooms, and if so, whether the Councils favour a proposal that the Committee should convene a conference of representatives of District Councils to consider the matter. 26 replies were received from which it appeared that nuisances exist in four districts and that 14 Councils were in favour of the convening of a Conference.

TABLE XXVI.

BIRTHS, DEATHS, ANNUAL RATES, &c., 1926.

Sanitary District	Area (acres).	Population. Census, 1921.	Population. Estimated 1926 for Birth-rate	Population. Estimated 1926 for Death-rate	Registrar-General's figures. Births.	Deaths at all ages.	Deaths under 1 year of age.	Deaths at Various Ages. (Figures supplied by Medical Officers of Health.) Under 1 year.	1 and under 2.	2 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and upwards.	Total Deaths.	Annual Rates per 1,000 of estimated Population. Birth-rate.	Death-rate.	Zymotic Death-rate.	P.H. Respiratory Death-rate.	Other Temporary Death-rate.	Infant Mortality Rate (per 1000 births.)
URBAN.																						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
Barking	3,805	35,523	38,920	38,920	818	266	49	49	17	9	8	13	41	102	127	366	21·0	9·4	0·7	0·8	1·5	60
Braintree	2,224	6,970	7,149	7,149	165	72	2	2	2	1	1	3	7	23	33	72	14·7	10·1	0·1	1·0	1·5	19
Brentwood	460	6,853	7,126	7,126	90	70	6	6	...	1	5	...	4	24	30	70	12·6	9·8	...	0·3	1·9	67
Brightlingsea	2,867	4,209	4,215	4,215	58	46	1	1	...	...	1	...	6	5	33	46	13·8	10·9	...	1·2	1·7	17
Buckhurst Hill	873	5,608	5,187	5,187	77	41	3	3	...	...	...	2	1	12	23	41	14·8	7·9	...	1·2	1·2	39
Burnham-on-Crouch	4,547	3,434	3,490	3,490	53	43	2	...	...	...	...	...	...	...	...	...	15·2	12·3	...	0·6	1·1	38
Canvey Island	4,400	1,795	†4,373	4,373	36	27	4	4	1	...	3	3	5	5	6	27	8·2	6·2	...	1·1	0·7	111
Chelmsford B.	3,112	20,749	22,800	22,800	352	232	22	...	...	...	...	...	...	...	...	...	15·4	10·2	0·6	0·7	1·1	62
Chingford	2,868	9,482	11,200	11,200	228	98	10	10	1	1	1	4	19	23	39	98	19·8	8·5	0·3	0·4	0·7	44
Clacton	4,069	17,051	13,540	13,540	159	123	10	10	...	1	1	4	12	29	66	123	11·7	9·1	0·1	0·4	0·7	63
Colchester B.	11,333	43,393	49,480	44,780	800	476	50	51	11	8	9		66	99	232	476	16·2	10·6	0·3	0·6	1·4	62
Dagenham	6,595	9,127	†22,603	22,603	742	214	69	...	...	...	...	...	...	...	...	...	32·8	9·5	1·8	1·0	1·2	93
Epping	1,420	4,196	4,638	4,638	64	53	3	...	...	...	...	...	...	...	...	...	13·8	11·4	...	0·9	1·3	47
Frinton	422	3,032	2,110	2,110	30	17	1	1	...	...	...	...	1	3	12	17	9·5	8·1	...	...	0·9	59
Grays	1,359	17,359	17,910	17,910	343	184	16	16	2	15	7	7	25	41	71	184	19·2	13·3	0·3	0·7	1·9	47
Halstead	647	5,523	5,821	5,821	78	82	4	4	1	...	...	1	1	22	50	82	13·4	14·1	0·3	0·3	1·5	51
Harwich B.	1,541	13,046	12,290	11,890	230	112	11	...	...	...	...	...	...	...	...	...	18·7	9·4	0·2	0·4	1·5	48
Hornchurch	6,783	10,801	19,727	9,727	170	104	10	...	...	...	...	...	...	...	...	...	17·5	10·7	0·2	0·3	0·5	59
Ilford B.	8,496	85,194	100,500	100,500	1569	839	68	68	12	20	21	38	86	227	366	838	15·6	8·3	0·3	0·7	1·2	45
Leyton B.	2,594	128,130	130,000	130,000	2022	1261	131	131	22	38	29	52	145	308	536	1261	15·6	9·7	0·3	0·7	1·6	65
Loughton	3,961	5,749	6,353	6,353	118	47	1	1	1	...	...	2	2	15	26	47	18·6	7·4	...	0·6	0·9	8
Maldon B.	3,028	6,590	6,206	6,206	97	64	7	7	2	1	2	1	4	9	35	64	15·6	10·3	0·6	0·5	1·0	72
Romford	5,630	19,442	21,680	21,680	342	241	20	19	6	3	6	9	29	57	108	237	15·8	11·1	0·5	0·6	1·1	58
Saffron Walden B.	7,592	5,874	5,448	5,448	67	68	3	...	...	...	...	...	...	...	...	...	12·3	12·5	0·4	0·2	1·8	45
Shoeburyness	1,036	6,413	5,862	5,262	117	49	6	...	...	...	...	...	...	...	...	...	20·2	9·4	1·2	0·4	0·8	51
Tilbury	1,855	9,613	14,740	14,740	339	131	23	23	8	8	6	12	26	29	19	131	23·0	8·9	1·6	1·1	1·5	68
Waltham Holy Cross	11,017	6,847	6,804	6,804	99	77	5	6	1	2	2	4	9	22	31	77	14·5	11·3	0·4	0·3	1·2	50
Walthamstow	4,343	129,395	125,500	125,500	2218	1151	100	...	...	...	...	...	...	...	...	...	17·7	9·2	0·3	0·7	1·4	45
Walton-on-the-Naze	2,046	3,064	2,746	2,746	35	32	1	1	...	...	...	...	2	8	21	32	12·7	11·6	...	...	2·5	29
Wanstead	1,679	15,298	16,510	16,510	203	173	9	...	...	...	...	...	...	...	...	...	12·3	10·5	0·5	0·2	1·0	44
West Mersea	3,185	1,908	†1,696	1,696	17	11	...	...	...	...	...	1	2	...	7	10	10·0	6·5	...	0·6	...	...
Witham	3,732	2,717	3,980	3,980	63	43	2	2	...	...	...	1	7	9	22	41	15·8	10·8	...	0·5	1·0	32
Wivenhoe	1,564	2,329	2,270	2,270	30	37	2	2	3	...	...	1	1	11	19	37	13·2	16·3	1·3	...	0·9	67
Woodford	2,161	21,236	21,820	21,820	297	207	6	5	5	1	8	10	24	52	102	207	13·6	9·5	0·3	0·2	1·4	20
Total	123,606	670,048	714,934	709,234	11,996	6793	657	657	143	170	178	284	805	1649	2907	6793	16·8	9·6	0·4	0·6	1·3	55
								The figures in Cols. 9—17 are given by the M.O.H., whereas the totals are supplied by the Registrar-General.													
RURAL.																						
Belchamp	20,560	4,939	4,115	4,115	82	37																
Billericay	40,304	24,211	31,320	31,120	527	309	30	26	2	3	7	17	37	77	145	314	16·8	9·9	0·2	0·6	0·9	57
Braintree	62,348	18,779	19,180	19,180	229	228	6	6	1	5	4	4	13	54	141	228	12·5	11·9		0·5	1·8	25
Dunmow	11,874	2,576	2,279	2,279	44	33	3	3		2	2		4	11	11	33	19·3	14·5	0·4	0·9	2·6	68
Dunmow	83,645	24,616	26,030	26,030	436	288	18	19	2	2	3	10	18	69	165	288	16·3	10·3	0·2	0·6	1·8	41
Dunmow	73,503	15,352	14,800	14,800	228	176	9	9		3	2	5	10	31	116	176	15·4	11·9	0·1	0·1	1·5	39
Epping	39,655	14,625	15,520	15,520	251	160	12	...	...	...	...	...	...	...	...	...	16·2	10·3	0·2	0·3	1·1	48
Halstead	38,712	9,743	9,490	9,490	134	105	5	5	2	...	...	...	5	25	68	105	14·1	11·1	...	0·3	0·7	37
Lexden & Winstree	66,300	17,568	18,115	18,115	297	201	11	11	2	2	4	5	15	45	117	201	16·4	11·1	0·2	0·6	1·0	37
Maldon	82,342	16,479	16,530	16,530	241	196	12	11	2	2	4	3	22	44	106	194	14·6	11·9	0·4	0·6	1·1	50
Ongar	47,236	10,054	10,180	10,180	197	134	13	13	2	3	3	7	8	35	63	134	19·3	13·2	0·5	0·7	1·2	66
Orsett	38,684	22,960	24,500	24,500	397	220	12	...	...	...	...	...	...	...	...	...	16·1	8·9	0·2	0·6	0·8	33
Rochford	50,663	21,068	28,591	28,591	537	310	34	31	4	4	11	18	29	74	139	310	18·8	10·8	0·4	0·6	1·0	63
Romford	16,381	9,467	21,950	21,950	478	194	39	...	...	...	...	...	...	...	...	...	21·8	8·8	0·3	0·9	1·3	63
Saffron Walden	59,975	10,087	9,736	9,736	153	127	6	...	...	...	...	...	...	...	...	...	15·7	13·0	0·3	0·6	1·3	39
Stansted	22,954	6,828	6,911	6,911	93	83	2	2	1	1	...	1	10	20	48	83	13·4	12·0	0·1	0·7	1·3	21
Tendring	73,331	21,721	22,660	22,660	415	229	16	16	4	3	4	10	25	46	151	259	18·2	11·4	0·1	0·4	1·2	39
Total	841,437	250,093	282,006	282,006	4747	3060	229	220	28	48	62	94	268	713	1617	3060	16·8	10·8	0·2	0·6	1·2	46
								The figures in Cols. 9—17 are given by the M.O.H., whereas the totals are supplied by the Registrar-General.													
Registrar-General's Figures. Total Boro' & Urban Districts	123,606	670,048	714,934	709,234	11996	6793	657	657	143	170	178	284	805	1649	2907	6793	16·8	9·6	0·4	0·6	1·3	55
Total Rural Districts	841,437	250,093	282,006	282,006	4747	3060	229	220	38	48	62	94	268	713	1617	3060	16·8	10·8	0·2	0·6	1·2	46
Total Administrative Counties	964,443	920,141	997,009	991,240	16743	9853	877	877	181	218	240	378	1073	2362	4524	9853	16·8	9·9	0·3	0·6	1·3	52

†These are the adjusted populations for calculating Birth and Death rates as the areas were constituted on 1st April, 1926.

TABLE XXVII.

CAUSES OF DEATH—YEAR 1926.

(Figures supplied by the Registrar-General.)

Sanitary District.	Enteric Fever.	Small-pox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Influenza.	Encephalitis Lethargica.	Meningococcal Meningitis.	Tuberculosis of Respiratory System.	Other Tuberculous Diseases.	Cancer, Malignant Disease.	Rheumatic Fever.	Diabetes.	Cerebral Hæmorrhage, &c.	Heart Disease.	Arterio-Sclerosis.	Bronchitis.	Pneumonia (all forms).	Other Respiratory Diseases.	Ulcer of Stomach or Duodenum.	Diarrhœa, &c. (under 2 years).	Appendicitis and Typhlitis.	Cirrhosis of Liver.	Acute and Chronic Nephritis.	Puerperal Sepsis.	Other Accidents and Diseases of Pregnancy and Parturition.	Congenital Debility and Malformation, Premature Birth.	Suicides.	Other Deaths from Violence.	Other Defined Diseases.	Causes ill-defined or unknown.	Total.	Special Causes included in Total.	
																																		Poliomyelitis	Polio-encephalitis.
URBAN.																																			
Barking	1	...	7	...	1	2	16	...	1	39	5	64	1	3	15	47	4	28	27	4	1	15	4	2	7	...	1	13	2	14	51	...	366	...	...
Braintree	...	...	...	...	1	...	2	...	...	7	...	9	...	1	...	14	3	1	7	1	...	...	1	...	...	...	...	2	1	2	15	1	77	...	...
Brentwood	...	...	...	...	...	...	2	...	...	2	...	11	...	...	4	6	2	3	3	1	...	...	...	...	...	...	...	1	...	4	26	...	70	...	...
Brightlingsea	...	...	...	...	...	...	...	...	...	...	...	4	...	1	5	5	1	4	3	...	1	...	...	...	...	...	...	...	...	1	16	...	46	...	...
Buckhurst Hill	...	...	...	...	...	...	...	...	...	...	...	4	...	...	1	7	...	5	1	...	...	...	1	...	1	...	...	...	1	1	10	1	41	...	...
Burnham-on-Crouch	...	...	...	...	...	...	...	...	...	2	...	6	...	...	4	10	2	3	1	...	...	...	...	...	...	...	...	...	...	1	10	...	43	...	...
Canvey Island	...	...	...	...	...	...	...	...	...	5	2	5	...	...	1	3	1	1	2	...	...	...	1	...	...	...	...	...	1	3	2	...	27	...	...
Chelmsford B.	1	...	4	...	7	...	4	...	...	16	2	32	1	1	11	34	6	10	10	4	4	1	5	2	3	...	...	12	3	4	54	...	232	...	...
Chingford	...	...	...	...	1	1	2	...	...	5	1	15	1	...	5	22	2	2	6	...	1	1	1	...	2	...	1	5	...	5	19	...	98	...	...
Clacton	...	...	1	...	...	...	1	...	...	6	...	18	...	2	17	16	8	5	5	...	1	...	...	4	4	...	1	6	2	4	21	1	123	...	...
Colchester B.	...	...	2	...	7	...	5	1	2	26	15	64	...	3	38	68	23	29	30	3	2	5	3	3	10	2	2	22	5	11	90	3	476	...	...
Dagenham	...	...	3	...	2	4	5	...	...	23	5	21	3	...	2	20	3	11	17	...	...	31	2	...	2	...	...	19	1	9	31	...	214	...	1
Epping	...	...	...	...	...	...	...	...	...	4	...	8	...	...	2	7	...	2	2	2	...	...	...	...	1	...	...	1	...	2	20	...	53	...	...
Frinton	...	...	...	...	...	...	...	...	...	...	...	4	1	...	1	2	1	1	1	...	...	...	...	...	...	...	...	1	...	...	5	1	17	...	...
Grays	1	...	2	...	...	1	2	1	...	12	1	25	4	1	10	11	2	14	16	4	3	2	2	...	4	...	1	10	1	7	47	...	184	8	2
Halstead	...	...	...	...	2	...	1	...	...	2	1	16	...	...	6	13	9	7	2	...	...	...	...	...	6	...	...	2	...	1	14	...	82	...	...
Harwich B.	2	...	...	...	...	...	1	...	...	5	4	13	...	5	9	14	3	14	4	...	...	...	...	1	3	1	...	6	3	1	23	...	112	...	...
Hornchurch	...	...	...	...	...	...	...	...	...	3	1	15	1	2	8	23	...	2	3	...	2	2	1	...	4	1	...	5	1	4	24	2	104	...	...
Ilford B.	...	...	7	1	5	12	8	1	...	66	10	125	2	12	38	146	21	54	52	11	10	10	9	3	19	3	1	32	9	22	140	...	839	...	...
Leyton B.	...	...	15	...	5	4	21	4	...	89	16	169	4	12	71	211	21	111	85	10	4	21	5	5	47	3	5	69	17	46	195	...	1261	...	...
Loughton	...	...	...	...	...	...	1	...	...	4	2	2	...	2	2	8	3	4	...	2	...	...	...	...	1	...	...	1	1	...	14	...	47	...	...
Maldon B.	...	...	2	...	2	...	...	...	...	3	1	8	...	...	2	16	8	1	5	2	...	...	...	1	1	...	...	4	...	...	7	1	64	...	...
Romford	...	...	4	1	...	1	3	...	...	12	4	38	1	...	14	52	4	13	8	2	4	4	2	1	7	...	2	7	3	3	44	1	241	...	...
Saffron Walden B.	1	...	1	...	...	...	1	1	...	1	1	12	...	3	2	11	2	6	4	...	2	...	...	...	1	2	...	...	...	2	15	...	68	...	...
Shoeburyness	...	...	1	...	...	3	...	...	...	2	1	5	...	1	5	11	1	1	3	...	...	2	...	...	1	...	...	1	...	1	10	...	49	...	...
Tilbury	...	...	3	1	1	3	2	...	...	16	1	9	...	1	4	9	1	7	11	4	3	6	1	1	2	...	2	4	1	11	26	1	131	2	...
Waltham Holy Cross	...	...	...	...	3	2	...	...	...	2	2	8	...	...	8	13	...	3	4	1	1	...	...	1	4	...	...	3	3	3	16	...	77	...	...
Walthamstow	...	...	4	4	9	5	14	4	3	92	23	137	7	8	69	183	27	81	83	13	12	17	5	6	43	2	2	44	16	29	210	1	1153	...	...
Walton-on-the-Naze	...	...	...	...	...	...	1	...	...	...	...	4	...	...	2	7	2	4	3	...	...	...	...	...	1	...	...	...	...	2	6	...	32	...	...
Wanstead	...	...	1	...	...	3	6	...	...	4	2	27	...	1	14	32	6	6	9	1	2	4	1	...	12	1	...	5	3	4	29	...	173	...	...
West Mersea	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	3	...	...	...	...	...	...	1	...	...	...	...	...	1	...	4	...	11	...	...
Witham	...	...	...	...	...	...	...	...	...	2	...	5	...	...	4	7	3	2	2	...	1	...	...	...	1	...	...	2	...	...	14	...	43	...	...
Wivenhoe	...	...	1	...	2	...	...	...	...	...	...	8	...	...	4	10	...	1	...	1	...	...	1	...	...	...	...	...	1	1	8	...	37	...	...
Woodford	...	...	...	...	2	4	4	2	...	5	2	30	...	1	22	29	...	11	18	2	1	...	1	...	4	1	2	4	1	8	53	...	267	...	...
	6	...	58	7	47	46	105	15	6	458	102	922	25	61	399	1068	169	447	428	68	65	121	49	30	191	14	22	289	72	210	1280	13	6793	10	3
RURAL.																																			
Belchamp	...	...	...	...	...	...	1	...	...	3	...	7	...	1	3	6	1	5	3	1	...	...	...	...	...	...	...	...	...	...	6	...	37	...	...
Billericay	...	...	2	...	...	2	3	...	...	18	5	49	1	6	16	29	11	15	9	5	2	1	5	1	5	2	3	15	4	14	86	...	399	...	...
Braintree	...	...	...	...	...	...	4	...	...	9	3	32	...	2	15	27	15	21	11	2	...	...	2	...	5	...	...	4	3	7	64	...	228	...	...
Bumpstead	...	...	...	...	1	...	2	...	...	2	...	4	...	...	...	5	...	4	2	...	...	...	1	...	3	...	1	1	1	3	3	...	33	...	...
Chelmsford	...	...	...	...	4	...	5	1	...	16	4	40	1	2	22	41	6	33	10	5	1	1	...	4	4	...	...	10	3	4	71	...	288	...	...
Dunmow	1	...	...	...	1	...	2	...	...	2	1	28	1	...	22	28	7	11	11	1	...	...	...	...	4	1	1	5	1	11	36	1	176	...	...
Epping	1	...	2	...	...	...	2	...	...	5	3	29	1	5	10	18	11	7	9	1	2	...	1	1	3	...	1	6	2	7	33	...	160	...	...
Halstead	...	...	...	...	...	...	1	...	...	3	...	15	...	...	11	15	6	4	2	1	2	...	...	1	4	...	...	2	...	4	32	1	105	...	...
Lexden & Winstree	...	...	...	3	...	3	1	...	...	10	3	25	...	2	9	38	6	13	4	2	2	...	...	...	2	...	...	4	4	5	62	...	201	...	...
Maldon	...	...	1	...	3	2	...	...	...	10	2	35	...	1	11	33	8	13	3	2	...	1	2	...	3	1	...	8	4	12	40	...	196	...	...
Ongar	...	...	...	1	1	2	...	...	...	7	1	26	1	4	8	20	...	4	7	1	1	3	2	...	2	...	...	3	...	6	32	...	134	...	...
Orsett	...	...	1	...	1	3	1	1	...	15	4	22	...	...	12	32	7	11	6	3	1	4	2	...	5	...	1	4	2	14	68	...	220	3	1
Rochford	...	...	3	...	1	2	6	2	...	17	4	46	...	1	19	47	7	15	14	1	8	5	2	...	6	...	1	12	4	14	65	8	310	...	...
Romford	1	...	3	...	...	1	4	...	...	20	5	29	...	1	14	32	4	11	17	1	1	2	3	...	5	...	...	10	...	9	39	1	194	1	...
Saffron Walden	...	...	...	...	...	...	2	...	...	6	...	14	...	2	7	22	13	9	3	1	...	3	1	...	4	...	1	1	2	5	20	1	127	...	...
Stansted	...	...	...	1	...	1	1	...	...	5	...	17	...	1	5	10	3	6	1	1	...	...	...	1	4	...	1	1	1	...	25	...	83	...	...
Tendring	...	...	1	...	1	1	1	1	...	10	4	32	...	3	17	49	14	15	11	1	2	...	...	1	2	...	...	10	5	7	69	2	259	...	...
Rural	3	...	13	...	14	13	42	7	...	158	39	441	5	31	198	452	121	197	122	31	24	17	24	13	59	4	10	97	36	122	753	14	3060	4	1
Boro' & Urban	6	...	58	7	47	46	105	15	6	458	102	922	25	61	399	1068	169	447	428	68	65	121	49	30	191	14	22	289	72	210	1280	13	6793	10	3
Total for Administrative County	9	...	71	7	61	59	147	22	6	616	141	1363	30	92	597	1520	290	644	550	99	89	138	73	43	250	18	32	386	108	332	2033	27	9853	14	4

TABLE XXVIII.

NOTIFICATIONS OF INFECTIOUS DISEASE AND ATTACK RATES, 1926.

(Figures obtained from the Weekly Notification Returns.)

Sanitary Districts.	Estimated Population (Death-rate) 1926.	Scarlet Fever.		Diphtheria.		Enteric Fever.		Puerperal Fever.		‡Puerperal Pyrexia.		Erysipelas.		Ophthalmia Neonatorum.		Tuberculosis, Respiratory.		Other Tuberculous Diseases.		Pneumonia.		Encephalitis Lethargica.	Acute Polio-myelitis.	Various.	Total.
		No.	Per 1,000	No.	Per 1,000.	No.	Per 1,000	No.	Per 1,000.	No.	Per 1,000.	No.	Per 1,000.	No.	Per 1,000.	No.	Per 1,000.	No.	Per 1,000.	No.	Per 1,000.	No.	No.	No.	No.
URBAN.																									
Barking	38920	136	3·5	64	1·6	3	0·08	3	0·08	1	0·10	37	0·9	17	0·4	119	3·1	26	0·5	76	1·9	...	2	1	479
Braintree	7149	42	5·9	10	1·4	2	0·3	...	...	...	...	3	0·4	...	...	20	2·8	10	1.4	2	0·3	1	...	...	90
Brentwood	7126	39	5·5	24	3·4	...	...	...	...	...	...	2	0.3	...	...	5	0·7	4	0·6	11	1·5	.	...	...	85
Brightlingsea	4215	4	0·9	...	...	1	0·2	...	...	...	...	1	0·2	...	...	5	1·2	2	0·5	5	1·2	..	...	...	18
Buckhurst Hill	5187	18	3·5	13	2·5	...	...	...	...	1	0·77	1	0·2	...	...	3	0·6	...	...	...	...	...	...	...	36
Burnham-on-Crouch ...	3490	8	2·3	4	1·1	...	...	...	...	...	...	...	...	...	...	3	0·9	1	0·3	2	0·6	...	...	10	28
Canvey Island	4373	9	2·1	9	2·1	...	...	...	...	...	...	...	...	...	...	13	3·0	5	1·1	1	0·2	...	...	...	37
Chelmsford B.	22800	16	0·7	1	0·04	2	0·08	...	...	...	...	1	0·04	1	0·04	25	1·1	7	0·3	12	0·5	3	...	...	68
Chingford	11500	27	2·3	9	0·8	...	...	1	0·09	...	...	1	0·09	...	...	9	0·8	8	0·7	4	0·3	1	1	...	61
Clacton-on-Sea	13540	11	0·8	2	0·1	...	...	1	0.07	1	0·29	2	0·1	...	...	14	1·0	5	0·4	5	0·4	...	...	17	58
Colchester B.	44780	80	1·8	8	0·2	5	0·1	...	...	1	0·09	15	0·3	6	0·1	42	0·9	17	0·4	58	1·3	3	..	297	532
Dagenham	22603	92	4·1	38	1·7	1	0·04	2	0·08	3	0·40	7	0·3	4	0·2	71	3·1	27	1·2	25	1·1	...	2	1	273
Epping	4638	4	0·9	14	3·0	...	...	...	...	2	1·72	...	...	...	...	13	2·8	1	0·2	8	1·7	...	...	95	137
Frinton-on-Sea	2110	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	0·5	...	...	2	0·9	...	2	2	7
Grays	17910	31	1·7	66	3·7	...	...	...	...	1	0·22	4	0·2	2	0·1	20	1·1	9	0·5	27	1·5	1	42	...	203
Halstead	5821	45	7·7	1	0·2	1	0·2	...	...	...	...	1	0·2	...	...	3	0·5	4	0·7	5	0·9	1	...	...	61
Harwich B.	11830	24	2·0	2	0·2	1.	0·09	1	0·09	1	0·34	2	0·2	...	...	16	1·3	5	0·4	4	0·3	...	...	...	56
Hornchurch	9727	31	3·2	6	0·6	...	...	...	...	...	...	2	0·2	...	...	7	0·7	3	0·3	2	0·2	...	...	...	51
Ilford B.	100500	174	1·7	153	1·5	6	0·06	8	0·08	8	0·32	28	0·3	3	0·03	161	1·6	37	0·4	74	0·7	3	2	8	665
Leyton B.	136000	296	2·3	292	2·2	5	0·04	9	0·07	3	0·09	63	0·5	8	0·06	158	1·2	48	0·4	97	0·7	5	...	2	985
Loughton	6353	5	0·8	1	0·1	1	0·1	...	...	...	...	3	0·5	...	...	3	0·5	1	0·1	4	0·6	...	...	...	18
Maldon B.	6206	3	0·5	10	1·6	2	0·3	...	...	...	...	...	...	2	0·3	6	1·0	4	0·6	7	1·1	1	..	..	36
																Port 1									
Romford	21680	67	3·1	18	0·8	1	0·05	1	0·05	2	0·37	6	0·28	...	...	27	1·2	5	0·2	1	0·05	...	...	...	128
Saffron Walden B. ...	5448	9	1·6	1	0·2	...	...	1	0·2	...	...	...	...	...	...	2	0·4	3	0·5	...	...	1	...	...	17
Shoeburyness	5202	6	1·2	15	2·9	...	...	...	...	...	...	2	0·4	2	0·4	6	1.2	2	0·4	6	1·2	...	...	...	39
Tilbury	14740	74	5·0	25	1·7	1	0·07	1	0·07	...	...	3	0·2	1	0·07	38	2·6	5	0·3	6	0·4	...	13	69	236
Waltham Holy Cross ...	6804	43	6·3	16	2·4	...	...	...	...	...	...	1	0·1	...	...	2	0·3	3	0·4	1	0·1	...	...	44	110
Walthamstow	125500	512	4·1	272	2·2	5	0·04	5	0·04	5	0·16	60	0·5	9	0·07	153	1·2	55	0·4	128	1·0	10	2	1	1217
Walton on-the-Naze ...	2746	...	...	...	...	...	...	...	...	...	...	1	0·4	.	...	...	...	...	...	1	0·4	..	...	4	6
Wanstead	16510	37	2·2	31	1·9	...	...	1	0·06	...	...	3	0·2	...	...	13	0·8	4	0·2	17	1·0	...	1	231	338
West Mersea... ...	1636	...	...	1	0·6	...	...	...	...	...	...	...	...	...	...	1	0·6	1	0·6	...	...	...	...	...	3
Witham	3980	5	1·2	5	1·2	1	0·2	...	...	...	...	1	0·2	...	...	3	0·7	1	0·2	7	1·7	...	...	...	23
Wivenhoe	2270	2	0·9	...	...	...	...	1	0·4	...	...	...	...	...	...	1	0·4	...	...	...	...	...	...	37	41
Woodford	21820	34	1·6	24	1·1	1	0·05	1	0·05	...	...	9	0·4	...	...	13	0·6	10	0·5	24	1·1	...	...	...	116
	709234	1884	2·7	1135	1·6	39	0·05	36	0·05	29	0·16	259	0·4	55	0·08	977	1·4	307	0·4	622	0·88	30	67	819	6259
RURAL.																									
Belchamp	4115	6	1·5	1	0·2	...	...	...	...	...	...	...	...	...	...	5	1·2	5	1·2	2	0·5	...	...	...	19
Billericay	31120	53	1·7	26	0·8	1	0·03	4	0·1	...	...	6	0·2	2	0·06	42	1·3	10	0·3	11	0·3	..	1	30	186
Braintree	19180	43	2·2	7	0·4	1	0·05	...	...	...	...	2	0·1	..	..	22	1·1	4	0·2	17	0·9	...	...	...	96
Bumpstead	2279	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	0·8	...	...	3	1·3	...	1	1	7
Chelmsford	26690	45	1·7	13	0·5	2	0·07	...	...	1	0·15	...	...	3	0·11	21	0·8	4	0·1	4	0·1	...	...	...	93
Dunmow	14800	19	1·3	2	0·1	...	...	...	...	...	...	1	0·07	...	...	11	0·7	4	0·3	18	1·2	..	...	1	56
Epping	15520	33	2·1	28	1·8	1	0·06	...	...	2	0·51	3	0·2	...	...	17	1·1	11	0·7	4	0·3	...	...	20	125
Halstead	9499	64	6·7	5	0·5	...	...	...	...	...	...	1	0·1	...	...	9	0·9	5	0·5	2	0·2	1	...	...	87
Lexden and Winstree ...	18115	9	0·5	2	0·1	...	...	1	0·05	1	0·22	1	0·05	4	0·2	25	1·4	8	0·4	3	0·2	2	...	...	55
Maldon	16530	76	4·6	11	0·7	...	...	1	0·06	...	...	...	...	2	0·1	16	1·0	6	0·4	15	0·9	...	...	1	128
Ongar	10180	12	1·2	37	3·6	...	...	...	...	4	0·4	1	0·1	8	0·8	1	0·1	3	0·3	1	1	...	...	...	68
Orsett	24560	87	3·5	54	2·2	3	0·1	1	0·04	1	0·16	8	0·3	2	0·1	6	0·2	3	0·1	4	0·2	1	17	10	198
Rochford	28591	50	1·7	17	0·6	3	0·1	...	...	2	0·21	5	0·2	2	0·07	32	1·1	15	0·5	10	0·3	4	1	...	141
Romford	21950	65	3·0	16	0·7	...	...	2	0·09	1	0·13	4	0·2	...	...	44	2·0	16	0·7	11	0·5	1	1	1	152
Saffron Walden	9736	12	1·2	...	...	...	...	...	...	...	...	...	...	...	...	6	0·6	2	0·2	...	...	...	...	...	20
Stansted	6911	14	2·0	2	0·3	...	...	...	...	...	...	1	0·1	...	...	2	0·3	...	...	1	0·1	...	...	...	20
Tendring	22660	33	1·5	6	0·3	1	0·04	1	0·04	1	0·17	6	0·3	...	...	13	0·6	6	0·3	10	0·4	1	...	...	78
	282466	621	2·2	227	0·8	12	0·04	10	0·03	9	0·12	42	0·1	17	0·06	281	1·0	160	0·3	118	0·4	11	22	70	1549
Tot. Boro's & Urban Districts	709234	1884	2·7	1135	1·6	39	0·05	36	0·05	29	0·16	259	0·4	55	0·08	977	1·4	307	0·4	622	0·88	30	67	819	6259
Total Rural Districts ...	282466	621	2·2	227	0·8	12	0·04	10	0·03	9	0·12	42	0·1	17	0·06	281	1·0	160	0·3	118	0·4	11	22	70	1549
Total for Admin. County ...	991700	2505	2·5	1362	1·4	51	0·05	46	0·05	38	0·15	301	0·3	72	0·07	1258	1·3	467	0·4	740	0·7	41	89	889	7799

‡Notifiable from 1st October, 1926.

Mothers' Day, Hadleigh Child Welfare Centre. July, 1928.