

[Report 1946] / Medical Officer of Health, Dunmow R.D.C.

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Great Dunmow (England). Rural District Council.

Publication/Creation

1946

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REPORT

OF THE

Medical Officer of Health

W. J. MOFFAT

M.B., Ch.B., D.P.H.

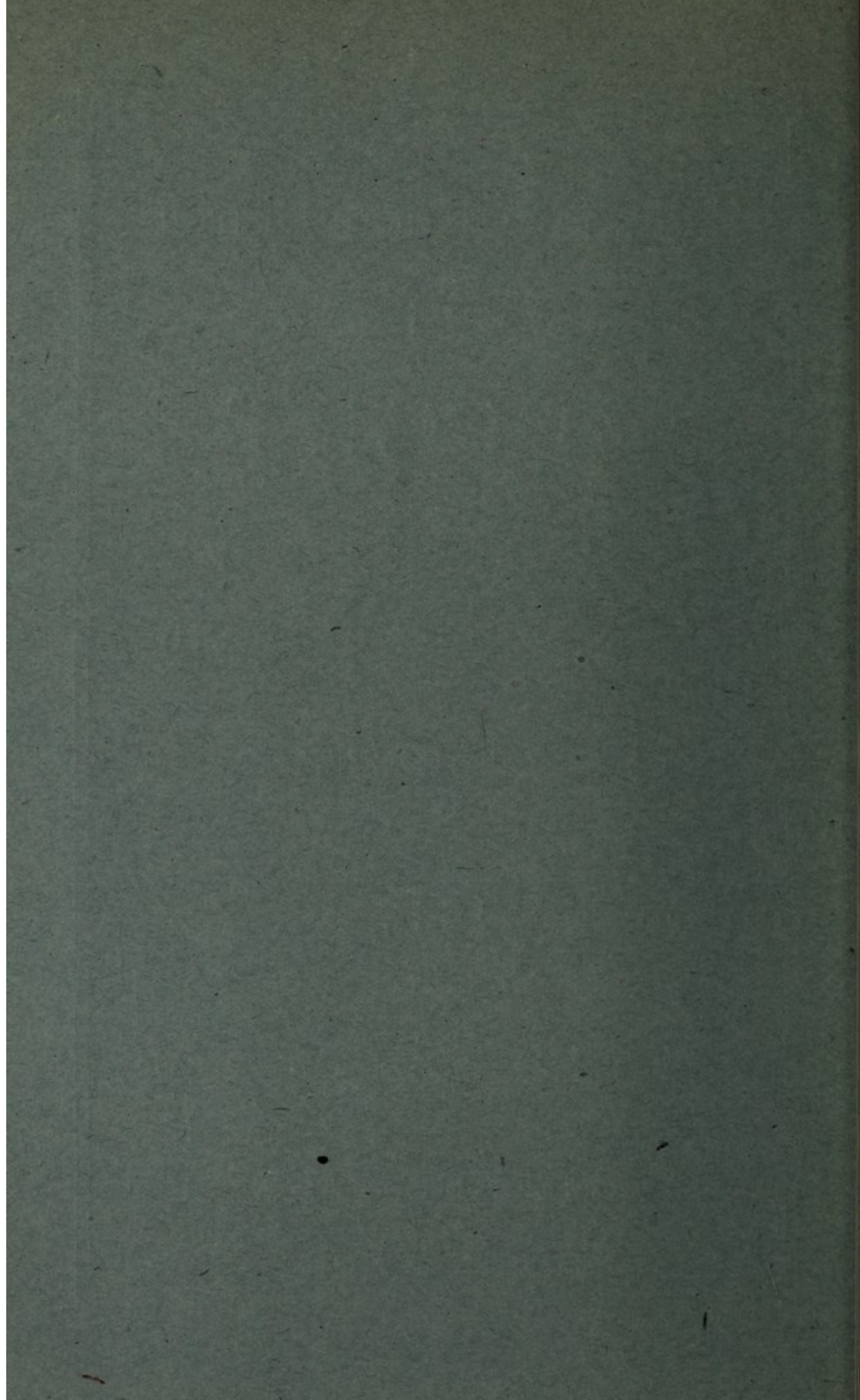
FOR THE YEAR

1946.



Braintree :

Printed by Chas. Joscelyne, High Street.



DUNMOW RURAL DISTRICT



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Second Sanitary Inspector :

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of Meat and Other Foods. (From 10th July, 1946).

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J. P. BURTON. G. H. MASON.

PUBLIC HEALTH OFFICES,
TOWN HALL,
BRAINTREE.

September, 1947.

Mr. Chairman, Ladies and Gentlemen,

I have the honour to present to you my Annual Report on the health and sanitary conditions of the Dunmow Rural District for the year 1946.

During the whole of 1946, Dr. S. Allman Hall was Acting Medical Officer of Health, pending my return from service with H.M. Forces.

The general health of the District was maintained; the birth rate was the highest for over twenty years; the death rate remained low.

The main pre-occupation of the Council during the year was the commencement of the erection of some 106 houses throughout the District. Although a complete up-to-date survey of the present housing situation does not yet exist, the records of the pre-war survey are maintained, and from that and other and more up-to-date information, it is obvious that, for several years to come, the house-building programme must, of necessity, be in the fore-front of the Council's activities.

The comprehensive water scheme for the District, completed in 1938-39, covers every parish in the District. Extensions to the mains have taken place in various parishes since 1938, and, in view of the ever increasing demand for water, the Council has decided, on the advice of their Consultant Engineers, to duplicate the existing source at Thaxted.

Unfortunately, for reasons largely due to the war, it has not been possible to proceed with the sewerage of the District at the rate anticipated in 1938, whereby work on the necessary schemes would keep pace with the provision of piped water supplies. Schemes for Great Dunmow, Stebbing and Takeley, prepared in 1939, could not be proceeded with at that time. The necessity for these and other similar works elsewhere in the District has not decreased with the passage of time.

The Council's Consultant Engineers have, at the Council's request, prepared comprehensive reports in respect of

water supply, sewerage and sewage disposal for the whole District. These proposals are now lodged with the Ministry of Health and an enquiry is awaited.

I wish to place on record my appreciation of the help and support from the members of the Council and of the co-operation so freely given by the Council's Officers to Dr. Hall during the period of my absence on war service from 1942 to 1946.

I am, Mr. Chairman, Ladies and Gentlemen,

Your obedient Servant,

W. J. MOFFAT.

GENERAL STATISTICS.

Area (in acres)	.. .. .	72,511
Estimate of resident population in mid-1946	.. .. .	17,810
Number of inhabited houses according to rate books	.. .. .	5,443
Rateable Value	.. .. .	£68,919
Sum represented by a penny rate	.. .. .	£292-19-6

SOCIAL CONDITIONS. There has been no change of any note since 1939. There has been no unemployment problem.

VITAL STATISTICS.

It was not feasible during the war years to publish annual figures, but the opportunity is now taken to present certain of the Vital Statistics for the years 1939-46 inclusive.

The Vital Statistics relating to estimated mid-year populations of the District, Birth Rates and Death Rates, local and national, for each year from 1937 to 1946 are given in Table I.

In Table II are set out the Causes of Death according to the figures supplied by the Registrar General for the period 1939-46. The figures for 1939 have, as far as is possible from local knowledge, been assigned to the Abridged List of Causes of Death used by the Registrar General from 1940 onwards, and as set out in the Manual of the International List of Causes of Death of 1938.

Table III gives the deaths occurring in the various age groups of Residents of the District in the years 1939-46, whether these deaths took place inside or outside the District.

Table IV contains extracts from the Vital Statistics of the District relating to Live Births, legitimate and illegitimate; Still Births and Deaths Rates of infants legitimate and illegitimate under one year of age for the same period.

TABLE I.—VITAL STATISTICS FOR 1946 AND PREVIOUS YEARS.

Year	Population estimated mid-year	BIRTHS			DEATHS.										Natural Increase (excess of births over deaths)
		Nett.			TOTAL NUM- BER REGISTER- ED IN DISTRICT	TRANS- FERABLE		NETT							
		Number	Rate	Rate England & Wales		Under 1 Year of age			At all ages						
						Number	Rate per 1000 net Births	Rate England & Wales	Number	Rate	Rate England & Wales				
1937	16170	218	13.4	14.9	144	0	83	6	27.0	58	227	14.0	12.4	-9	
1938	16190	247	15.2	15.1	141	11	79	12	48.0	53	209	12.9	11.6	38	
1939	a10220	228	14.0	14.8	114	8	77	10	43.9	*50	183	10.7	12.1	45	
	b17150														
1940	18240	231	12.7	14.1	192	14	82	4	16.8	*57	260	14.3	14.4	-29	
1941	18970	247	13.0	13.9	162	8	44	15	53.0	*60	246	12.9	13.5	1	
1942	18210	270	14.8	15.6	137	5	101	15	55.5	*51	231	12.7	12.3	39	
1943	17920	310	17.3	16.2	122	7	96	12	38.7	*49	211	11.8	13.0	99	
1944	18060	302	16.7	17.7	180	26	79	19	62.9	*45	233	12.9	12.7	69	
1945	17760	266	14.9	15.9	146	16	95	14	60.0	*46	225	12.7	12.6	41	
1946	17810	342	19.2	†19.1	146	5	84	12	35.1	*43	225	12.1	†11.5	117	

a For calculation of Birth Rate.

* Rate per 1000 'related' births.

b For calculation of Death Rates and Notifiable Disease.

† Provisional.

TABLE II.—CAUSES OF DEATH.

The Table below was compiled from figures supplied by the Registrar General and the classification is given under the new abridged list of causes of death as used in England and Wales contained in the Manual in the International List of Causes of Death.

Cause of Death	1939		1940		1941		1942		1943		1944		1945		1946	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Typhoid and paratyphoid fevers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cerebro-spinal fever ..	..	..	2	..	..	..	1	..	2	..	..	..	1	1	..	..
Scarlet fever ..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping cough ..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..
Diphtheria ..	..	1	..	..	..	1	..	..	..	..	1	..	..	..	..	..
Tuberculosis of respiratory system	3	2	3	1	2	4	2	1	3	..	4	5	1	2	2	5
Other forms of tuberculosis	1	1	1	1	..	2	1	1	1	2	1	..	..	..	..	..
Syphilitic disease ..	..	..	1	..	1	1	..	..	..	1	..	..	1	..	..	..
Influenza ..	2	1	4	2	5	2	..	..	2	5	1	..	..	1	1	1
Measles ..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Acute poliomyelitis and polio-encephalitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Acute infectious encephalitis ..	..	..	1	..	..	..	..	2	1	..	1	..	..	..	..	..
Cancer of buccal cavity and oesophagus (M), uterus (F)	2	2	4	2	1	2	4	1	..	3	3	..	3	..	..	1
Cancer of stomach and duodenum	5	1	2	2	3	6	2	2	1	2	1	7	6	7	6	4
Cancer of breast ..	..	1	..	4	..	6	..	3	..	4	..	..	..	6	..	1
Cancer of all other sites ..	6	8	16	8	6	8	15	8	15	11	6	11	12	9	11	12
Diabetes ..	1	8	2	4	..	3	2	1	..	5	..	1	..	1	1	5
Intra-cranial vascular lesions	6	6	12	14	16	21	10	11	11	18	12	6	17	15	8	14
Heart disease ..	19	21	25	32	23	29	24	29	26	23	37	32	25	31	33	35
Other diseases of circulatory system	8	10	5	4	3	2	3	2	4	2	7	2	1	4	6	6
Bronchitis ..	3	3	7	5	3	1	7	7	3	3	2	6	4	7	11	2
Pneumonia ..	4	4	4	4	8	2	4	6	8	4	5	4	5	4	6	2
Other respiratory diseases	1	1	3	2	4	1	..	1	..	1	2	1	2	..	1	1
Ulcer of stomach or duodenum	1	..	2	2	2	..	1	..	..	..	1	1	1	1	..	..
Diarrhoea under 2 years	..	1	1	..	..	..	..	..	..	1	2	1	1	..	..	..
Appendicitis ..	..	..	..	..	..	..	1	..	..	1	..	..	2	..	..	..
Other digestive diseases	..	3	1	6	4	3	3	3	3	4	4	6	5	4	4	4
Nephritis ..	..	2	4	4	7	6	2	6	3	3	2	3	2	2	5	2
Puerperal & post abortive sepsis	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Other maternal causes ..	..	2	..	1	..	..	..	..	..	..	1	..	1	..	..	..
Premature birth ..	1	..	..	1	6	3	4	1	2	3	3	1	1	..	..	..
Congenital malformation, birth injury, infantile disease	5	..	1	2	2	2	1	3	1	1	2	2	7	1	5	4
Suicide ..	4	..	2	..	..	..	..	1	3	..	3	1	..	..	2	..
Road traffic accidents ..	2	..	5	..	2	1	2	2	..	..	3	1	1	1	4	1
Other violent causes ..	1	2	7	7	3	2	2	1	..	1	4	2	5	2	2	1
All other causes ..	14	14	23	12	18	19	24	19	10	14	8	14	11	10	9	6
All causes ..	89	94	139	121	119	127	120	111	99	112	114	119	114	111	118	107

TABLE III. Nett Deaths at the Subjoined Ages of "Residents"
whether occurring within or without the District.

Year	At all Ages	Under 1 year	1-2 years	2-5 years	5-15 years	15-25 years	25-35 years	35-45 years	45-55 years	55-65 years	65-75 years	75 & upwards
1939	183	10	2	-	3	5	3	9	12	28	49	62
1940	260	4	2	3	4	2	8	15	14	33	80	95
1941	246	16	1	2	3	5	3	7	17	37	59	96
1942	231	15	-	-	2	4	2	12	11	25	56	104
1943	211	12	-	2	2	2	6	4	11	25	65	82
1944	233	19	2	-	2	7	4	13	7	28	66	85
1945	225	14	-	4	3	3	3	8	13	20	45	112
1946	225	12	2	-	1	5	3	7	12	21	57	105

TABLE IV.—EXTRACTS FROM VITAL STATISTICS 1939-46 INCLUSIVE.

Year	LIVE BIRTHS							STILL BIRTHS				DEATH RATE OF INFANTS UNDER 1 YEAR OF AGE	
	LEGITIMATE			ILLEGITIMATE			Birth rate per 1000 estimated population	Total	M	F	Rate per 1000 total (live & still births)	Legitimate per 1000 legitimate live births	Illegitimate per 1000 illegitimate live births
	Total	M	F	Total	M	F							
1939	223	110	113	5	4	1	14.0	8	4	4	35.1	40.3	200
1940	222	106	116	9	6	3	12.7	2	-	2	11.0	17.5	-
1941	233	127	106	14	8	6	13.0	9	2	7	37.1	55.8	-
1942	254	137	117	16	5	11	14.8	3	1	2	11.0	47.4	188
1943	275	137	138	35	15	20	17.3	12	6	6	37.3	40.0	83.3
1944	266	128	138	36	21	15	16.7	11	6	5	35.5	48.9	167
1945	227	114	113	39	16	23	14.9	14	10	4	50.0	57.3	71.4
1946	298	136	162	44	29	15	19.2	8	6	2	22.9	30.2	111

GENERAL PROVISION OF HEALTH SERVICES

Public Health Officers.

For list see page 1.

The Medical Officer of Health is also Medical Officer of Health for the Urban Districts of Braintree and Witham, and the Rural District of Braintree, and Assistant Medical Officer to the Essex County Council.

The Chief Sanitary Inspector is also Surveyor to the Council.

LABORATORY FACILITIES.

The bacteriological service is provided by the County Council in agreement with the Ministry of Health. In 1946 the laboratory serving the greater part of the area was that at Essex County Hospital, Broomfield. This arrangement has now been altered and specimens for examination have to be sent to the Public Health Laboratory, St. John's Hospital, Chelmsford. The laboratory at Haymead's Hospital, Bishop's Stortford is also available for parts of the District adjacent to that Hospital.

Examinations of samples of foodstuffs, including ice cream, water supplies and sewage effluents are conducted by the Counties Public Health Laboratories, 66 Victoria Street, London, S.W.1.; and of milk supplies by the Essex Institute of Agriculture at Writtle. All these arrangements are under the control of the County Council

AMBULANCE FACILITIES.

A motor ambulance, an ex-Army model, belonging to the District Council is available for all types of cases. A St. John's Ambulance Brigade Ambulance is also stationed at Dunmow and is available when necessary to supplement the Council's Ambulance for cases of general illness and accident, but not infectious disease. Co-ordination of ambulance services in adjoining districts is secured under the Essex County Council scheme.

The service has proved to be adequate for the needs of the District.

HOSPITALS.

Apart from the small Cottage Hospital at Hatfield Broad Oak there is now no Hospital in use in the District. The Council's Isolation Hospital has remained closed for the reception of patients since 1939. It ceased to function as a First Aid Post in 1945, when it was returned to the Council by Essex County Council. It has since remained empty.

Accommodation for cases of infectious disease requiring hospital treatment is found at the Infectious Diseases Hospitals at Saffron Walden, Chelmsford, and Colchester.

Cases of general illness from the District which require hospital treatment are admitted to the general hospitals at Chelmsford, Bishop's Stortford, Saffron Walden and Braintree. Patients are also admitted to Haymead's Hospital, Bishop's Stortford and to Essex County Council Hospital, Black Notley.

Maternity cases are admitted to St. John's Hospital, Chelmsford as a rule. Occasionally such cases are accommodated in the William Julien Courtauld Hospital, Braintree, or Bishop's Stortford Hospital.

St. Michael's Hospital, Braintree, is the Social Welfare Institution of the County Council which admits the majority of the cases of chronic sick from the District. Other accommodation is available at Chelmsford, Bishop's Stortford and Saffron Walden.

SANITARY CIRCUMSTANCES OF THE AREA.

WATER.

Piped water supplies are now in existence in at least parts of the twenty-five parishes. The Council's Water Works at Thaxted supply the following parishes; Aythorpe Roding, Little Bardfield, Barnston, Broxted, Great Canfield, Great Dunmow, Great Easton, Little Easton, High Easter, High Roding, Leaden Roding, Lindsell Margaret Roding, Takeley, Thaxted, Tilty, and White Roding. The parishes of Little Dunmow, Felstead and Stebbing are supplied from the Council's Water Works at Great Dunmow. The two supplies from Thaxted and Great Dunmow, although normally separate, can be made interchangeable.

The Herts and Essex Water Company supply the parishes of Great and Little Hallingbury and Hatfield Broad Oak, including Hatfield Heath. Chickney parish obtains a supply from the Saffron Walden Rural District Council's mains.

The quality of the raw water from the Council's Works is controlled by bacteriological examination. Samples of water in supply (i.e. after chlorination and treatment for iron removal) are also submitted for analysis. During the year three samples of raw water and three of water in supply were taken for examination, both from the Thaxted supply and from the Great Dunmow supply. All gave satisfactory results, in that the sample in each case was reported upon as being pure and wholesome and suitable for public supply purposes.

The Herts and Essex Water Company take frequent samples during the year of the water in their supply mains, as well as from their sources of supply. The Council are furnished with copies of the results of examinations. All these gave satisfactory results, consistent with a pure and wholesome supply.

Samples of water from the Council's own Water Works are also submitted for chemical analysis at least twice yearly.

Copies of the complete analyses, chemical bacteriological of raw water from both the Thaxted and Great Dunmow boreholes are set out

on pages 11 and 12. A copy of a similar analysis of the Herts and Essex Company's water will be found on page 13.

No action was required in respect of any form of contamination during the year. The waters are not likely to have any plumbo-solvent action.

Details of the number of dwelling houses and of the approximate numbers of the population supplied in the various parishes from the Council's public water mains are given in the table below. Corresponding information with regard to the area supplied by the Herts and Essex Water Company is not readily available.

Parish.	No. of Houses.	Estd. Popn.	Houses on Main Supply	Est. Pop on Main Supply	Houses Supplied by Standpipe	Est. Pop. Supplied by Standpipe
Aythorpe Roding	76	242	27	86		
Little Bardfield ..	116	368	29	92		
Barnston	84	271	56	179		
Broxted	154	492	92	295		
Great Canfield ..	136	433	83	265		
Little Canfield ..	72	233	54	172		
Great Dunmow ..	990	3164	842	2700		
Little Dunmow ..	112	359	61	195		
Great Easton ..	199	638	136	435		
Little Easton ..	107	343	65	208		
Felstead	500	2065	354	1503	108	346
High Easter ..	192	611	86	275		
High Roding ..	120	385	94	301		
Leaden Roding ..	66	210	52	166		
Lindsell	83	265	52	166		
Margaret Roding ..	84	270	41	131		
Stebbing	310	990	200	640		
Takeley	295	908	215	689		
Thaxted	566	1811	523	1670		
Tilty.. ..	25	80	2	6		
White Roding ..	108	372	57	182		

During the year, the Council's water mains were extended by 4,480 yards in Molehill Green and Evelyn Road, Felstead. New connections to the Council's mains numbered 129. The corresponding figures for the Herts and Essex Water Company in the western part of the District are not available.

The estimated consumption for the Council's supply area was 22 gallons per head per day. The scheme was originally designed to supply the population in that area with 20 gallons per head per day. The Council's Consultant Engineers have prepared a scheme to extend the water mains to those parts of the District not yet provided with a main water supply. This entails the sinking of another borehole at Thaxted. It is assumed that the average daily consumption per head will increase considerably on the pre-war figures as the erection of the modern houses proceeds.

WATER ANALYSES.

Date of Analysis 4/4/46.

Sample from THAXTED PUBLIC SUPPLY.

Chemical Results in Parts per 100,000.

Appearance : Bright. Slight granular deposit of mineral debris, consisting of iron oxide. Very slight growth of crenothrix present.

Turbidity : Less than 5 parts per million, Silica Scale.

Colour	Normal	Odour	Nil
Reaction pH	Neutral 7.1	Free Carbonic Acid	3.5
Electric Conductivity at 20°C	730	Total solids, dried at 180°C	49.0
Chlorine in Chlorides	3.5	Alkalinity as Ca CO ₃	30.5
Hardness: Total	43.0	Nitrogen in nitrites	0.00
Temporary	28.5	Nitrogen in nitrites, less than	0.001
Permanent	14.5	Ammoniacal Nitrogen	—
Free Ammonia	0.0042	Albuminoid Nitrogen	—
Albuminoid Ammonia	0.0007	Oxygen absorbed in 4 hrs at 27°C	0.015

Metals: Total Iron 0.10. In solution 0.003. Other metals absent

BACTERIOLOGICAL RESULTS.

Number of "Bacteria" growing on Agar per cc. or ml. in :

1 day at 37°C	2 days at 37°C	3 days at 20°C
0	4	—

Presumptive Coliform Reaction	Present —	Absent 100 cc.
Bact. coli.	Present —	Absent 100 cc.
Cl. welchii Reaction	Present —	Absent —

Report : This sample is bright in appearance and has a slight deposit of iron-oxide. The water is neutral in reaction, very hard in character but contains no excess of salinity or mineral constituents in solution. It is of very satisfactory organic and bacterial purity.

Subject to the removal of iron, the water is considered pure and wholesome in character and suitable for public supply purposes.

(Signed) GORDON MILES, B.Sc., F.R.I.C.

For the Counties Public Health Laboratories.

Date of Analysis 25/10/46.

Sample from GREAT DUNMOW PUBLIC SUPPLY.

Chemical Results in Parts per 100,000.

Appearance: Faint opalescence with very few particles of mineral debris.

Turbidity: 5 parts per million, Silica Scale.

Colour	Normal	Odour	Nil
Reaction pH Neutral	7.1	Free Carbonic Acid	3.5
Electric Conductivity at 20°C	680	Total Solids, dried at 180°C	45.5
Chlorine in Chlorides	3.4	Alkalinity as Ca CO ₃	31.0
Hardness: Total	34.0	Nitrogen in nitrates	0.00
Temporary	31	Nitrogen in nitrites	0.001
Permanent	3.0	Ammoniacal Nitrogen	—
Free Ammonia	0.014	Albuminoid Nitrogen	—
Albuminoid Ammonia	0.0000	Oxygen absorbed in 4 hrs. at 27°C	0.02
Metals: Total Iron	0.022	Other metals	absent.

BACTERIOLOGICAL RESULTS.

Number of "Bacteria" growing on Agar per cc. or ml. in:

	1 day at 37°C	2 days 37°C	3 days at 20°C
	1	16	—
Presumptive Coliform Reaction	Present —	Absent 100 c.c.	
Bact. Coli.	Present —	Absent 100 c.c.	
Cl. welchii Reaction	Present —	Absent —	

Report: This sample is almost clear and bright in appearance, neutral in reaction and free from metals apart from a minute trace of iron. The water is very hard in character although not to an excessive degree, and is free from any excess of mineral or saline constituents in solution. It is of very satisfactory organic quality and bacterial purity.

These results are indicative of a pure and wholesome water suitable for public supply purposes.

(Signed) ROY HOATHER.

For the Counties Public Health Laboratories.

Date of Analysis 18/3/46.

Sample from HERTS AND ESSEX WATERWORKS COMPANY.

Chemical Results in Parts per 100,000.

Appearance: Slight opalescence settling to a film deposit consisting of iron-oxide.

Turbidity: 5 parts per million, Silica Scale.

Colour	Normal	Odour	Nil
Reaction pH Neutral	7.1	Free Carbonic Acid	3.6
Electric Conductivity at 20°C	660	Total Solids, dried at 180°C	44.0
Chlorine in Chlorides	2.5	Alkalinity as Ca CO ₃	31.0
Hardness: Total	36.0	Nitrogen in nitrates	0.00
Temporary	29.0	Nitrogen in nitrites, less than	0.001
Permanent	7.0	Ammonical Nitrogen	—
Free Ammonia	0.021	Albuminoid Nitrogen	—
Albuminoid Ammonia	0.0000	Oxygen Absorbed in 4 hrs. at 27°C	0.005

Metals: Total Iron 0.030. In solution: 0.015. Other metals absent.
Free chlorine reaction absent.

BACTERIOLOGICAL RESULTS.

Number of "Bacteria" growing on Agar per cc. or ml. in:

1 day at 37°C	2 days at 37°C	3 days at 20°C
0	0	1

Presumptive Coliform Reaction	Present —	Absent
Bact. Coli.	Present —	Absent 100 c.c.
Cl. welchii Reaction	Present —	Absent 100 c.c.

Report: This sample has a slight opalescence due to the presence of a trace of iron, but is not unduly turbid. The water is neutral in reaction, very hard in character but contains no excess of salinity or mineral constituents in solution. It is of the highest standard of organic and bacterial purity.

These results are consistent with a pure and wholesome water suitable for public supply purposes apart from the objection that it is not quite clear and bright in appearance.

(Signed) GORDON MILES, B.Sc., F.R.I.C.

For the Counties Public Health Laboratories.

DRAINAGE AND SEWERAGE.

The question of extensions to, and improvements of, the sewerage of the whole District was considered before the war, when the extensions of the water mains to the major part of the area had made apparent the need for increased provision for this. Improvements to the existing Sewerage Disposal Works at Great Dunmow and Sewerage schemes for Takeley and Stebbing were approved by the Council, but it was not possible to carry out any of this work before the outbreak of war.

Further consideration was given by the Council to this matter in 1944-45. Their Consultant Engineers were requested to prepare a comprehensive up-to-date report on Sewerage and Sewage Disposal covering the whole District. This report was submitted in 1945. The scheme provides for the replacement of existing obsolete Disposal Works at Great Dunmow and Thaxted, as well as detailing schemes, either singly or in combination, for those parts of the District not yet served by sewers. Approval for that part of the scheme as it affects the parishes of Broxton, Little Canfield and Little Dunmow has been received from the Ministry of Health. It is expected that an Inquiry will shortly be held by the Ministry of Health into the other aspects of the scheme.

Only two new connections were made to the sewer during 1946.

Notes on the functioning during the year of the various Disposal Works in the District are given below.

Great Dunmow Sewage Works. These Works are now well beyond their useful life and quite inadequate to deal with the normal dry weather flow from the sewers. The Works have now been overloaded for more than ten years. Various temporary expedients have been tried but with no marked success. It is hoped that these Works will be replaced as soon as possible.

Two samples of the effluent from these Works were taken in 1946. Both were reported upon as being very unsatisfactory.

Felstead Sewage Works. Three out of the four samples of the effluent from this Disposal Works taken during the year were reported as unsatisfactory. The Works were modernised in 1939, but since that date the effluent has, on the average, been only on the border line between satisfactory and unsatisfactory. Here in particular the lack of suitable personnel to take charge of the Works has been felt, and this factor explains in some part, the disappointing results obtained so far.

Thaxted Sewage Works. Since 1939, the effluent from these Works has been almost consistently unsatisfactory. Two out of the three samples taken in 1946 proved to be unsatisfactory. It is hoped that it will not be long before these Works are dealt with.

Hatfield Broad Oak. The two small Works in this parish, at Hatfield Town and Hatfield Broad Oak respectively, continued to yield very satisfactory effluents. Connection of a P.O.W. Camp to the Hatfield Heath main sewer has necessitated extensions to the Disposal

Works there by way of the installation of detritus and settlement tanks, percolating filters, humus tank, sludge well, sludge digestion tank and sludge drying beds.

Dunmow Aerodrome Sewage Works. All three samples from these Works were satisfactory.

RIVERS AND STREAMS.

Pollution of rivers and streams throughout the District exists at the undermentioned sites.

River Chelmer	Thaxted Disposal Works. Duton Hill. Great Easton. Little Easton. Great Dunmow Disposal Works.
Stebbing Brook	Stebbing Village.
Barnston Brook	Barnston.
Pincey Brook.	Takeley.

The comprehensive Sewerage scheme for the District aims at the elimination of all the above sources of pollution from aggregations of population.

PUBLIC CLEANSING.

The whole District is covered by a regular collection by motor vehicle, weekly in the lighting areas, fortnightly in the non-lighting areas. The collection of salvage is combined with that of refuse collection.

It was becoming evident towards the end of the year that the existing refuse tip adjacent to the Great Dunmow Sewage Works was fast reaching the limits of its capacity. Negotiations for another site were begun.

Owing to the war, the Council's vehicles have not been replaced, and, in the case of the original refuse collection vehicle, the body and moving floor have had to be removed, and an ordinary hand-tipping body substituted. These vehicles are unsuited for the removal of household refuse in developed areas and require replacement at an early date.

SANITARY INSPECTION OF THE AREA.

The following table summarises the work done under this heading during the year :—

Complaints received	...	...	...	111
Inspections and re-inspections	...	...	...	250
Nuisances detected	...	...	...	94
Informal notices served	...	...	...	77
Notices outstanding 31st December	...	...	...	3
Statutory Notices served	...	...	...	3
Filthy houses cleaned	...	...	...	10
Privies converted to E.C.	...	...	...	1
Houses disinfected	...	...	...	4
Bedding, parcels of, steam disinfected	...	...	...	11

SHOPS.

There were 57 inspections of shops in the District in 1946. No major defects were discovered.

ERADICATION OF BED BUGS.

Ten cases of bug infestation of various properties (houses, agricultural workers' hostels, etc.) were brought to light during the year. In all these cases, successful eradication was accomplished by the employment of a five per cent. solution of D.D.T. in kerosene as a spray for buildings and furniture, coupled with steam disinfection of clothing and bedding.

FACTORIES ACT, 1937.

Inspections. There are 31 premises on the register, 17 with, and 14 without, mechanical power. All of these were inspected. It was not found necessary to serve written notices or take proceedings in any case.

Defects Found. In seven cases defects were found. These related to sanitary conveniences, which in one case were deficient, and in six were unsuitable or defective. Four of the latter instances had been remedied by the end of the year.

Outwork in unwholesome Premises. There were no instances of this.

HOUSING.

In September 1939, there were 5,374 houses in the District. Of these, 144 had been included in Demolition Orders or Clearance Areas. The then housing deficiency was estimated at some 250 houses. Sites for 192 further houses had already been acquired by the Council.

During the war, 19 houses were demolished by enemy action, while a further 340 required extensive repairs. The 144 houses dealt with under the Housing Acts, but still standing, perforce had to be occupied when the District became a Reception Area under the Government Evacuation Scheme.

At the beginning of 1946, it was estimated that there was a deficiency of some 550 houses, if the pre-war requirements and the demands arising, but unfulfilled, during the war years were to be met. In addition, some 1300 of the existing houses are sub-standard. Of 725 houses inspected during the year, 136 were found to be unfit for habitation and incapable of repair at reasonable cost, while 8 were unfit but capable of re-conditioning.

By the end of 1945, the Council had authority to go to tender for the erection of 128 houses. At the end of 1946, there were 106 in the course of erection. These were distributed among the following parishes:

Broxted	8	Felstead	34
Great Dunmow	34	Little Canfield	8
High Roding	4	Great Hallingbury	12
Thaxted (Monk Street) 6			

Negotiations were in progress for a further 6 at Great Dunmow and 16 at Great Easton.

Additional sites had been acquired at Thaxted for 64 houses, and at Little Dunmow for 14. Negotiations had commenced for the acquisition of a further fourteen sites at Hatfield Broad Oak, Hatfield Heath, Takeley, Little Hallingbury, Margaret Roding, White Roding, Little Bardfield, Barnston, High Easter, Broxton, Little Easton, Stebbing, Great Dunmow and Leaden Roding.

At the end of 1946, twenty-one houses had been completed by private enterprise in the District. One of these had been completed in 1945.

INSPECTION AND SUPERVISION OF FOOD.

Milk Supply. The premises concerned in the production or sale of milk have been regularly inspected. Samples were taken for bacteriological and biological examination with the following results:

	RESULTS		
	Samples	Satisfactory	Unsatisfactory
Methylene Blue Reaction	16	13	3
Biological examination	21	21	—
Pathogenic organisms	2	2	—

During the year two dealers were registered for the sale of milk. Two supplementary licences for the sale of milk were also granted.

Meat. Under the Ministry of Food scheme for centralised slaughtering, meat for consumers in the District is inspected post-mortem at the Ministry's Slaughter-houses. No call was made on the Council's Inspectors.

The slaughtering of pigs by private licence entailed 149 inspections of pigs so slaughtered. Two pig carcasses and one head were condemned for tuberculosis, four pigs' lungs for pneumonia.

Other meat and meat products condemned in shops totalled 525 lbs.

Other Foods. Food inspected in shops etc., and condemned as unfit for human consumption was as follows:

Tinned Foods	418 tins	Fruit	88 lbs.
Milk Products	17 lbs.	Flour, bread, etc.	258 lbs.

Ice Cream. Nearly all the Ice Cream sold in the District is manufactured elsewhere and sold from refrigerators or containers with a freezing agent.

Two applications as vendors of Ice Cream under the Essex County Council Act, 1933, were granted.

Bakehouses. Twenty bakehouses were inspected during the year. In three cases lime-washing was found to be required, otherwise conditions were satisfactory.

PREVALENCE OF AND CONTROL OVER INFECTIOUS DISEASE.

The incidence of cases of notifiable disease other than tuberculosis and infective hepatitis during 1946 were as set out in the table on page 19. The one case of diphtheria occurred in a child who had not been immunised against the disease.

There was no unusual incidence of the common communicable, but not notifiable diseases.

INFECTIVE HEPATITIS.

This condition was made locally notifiable in the District, as part of the Eastern Region, in December 1943, by the Jaundice Regulations of 1943. The following table shows the numbers and age distribution of the cases notified since the disease became notifiable.

None of the cases were admitted to hospital. There were no deaths from the disease.

Year	At all ages	Under 1 year	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	5 to 10 years	10 to 15 years	15 to 20 years	20 to 35 years	35 to 45 years	45 to 65 years	65 and over
1943	2	...	...	...	...	1	...	...	...	1	...	...	...
1944	30	...	...	...	1	...	1	5	4	12	2	2	...
1945	17	...	...	...	...	...	2	2	...	4	4	3	...
1946	9	...	...	...	1	...	2	1	4	...	...	...	...

DIPHTHERIA PROPHYLAXIS.

By 31st December, 1946, after the provision of free immunisation, either by the Council or by Essex County Council as the Welfare Authority for the area, had been in operation for six years, a total of 2,645 children under the age of fifteen years had completed a full course of immunisation under these auspices. Of that total 597 were in the age group 0—4 years, and represent 43.3% of the child population in that age group. In the age group 5-15 years, 2,048 children representing 70.6% of the estimated mid-year population in that age group had been immunised.

It is known that many children are now being immunised privately by general practitioners in the district. The numbers cannot be ascertained, but it would be reasonable to estimate that some fifteen to twenty per cent of the 0—4 age group are now immunised annually in this way.

NOTIFIABLE DISEASES (OTHER THAN TUBERCULOSIS AND INFECTIVE HEPATITIS) NOTIFIED DURING THE YEAR 1946

NOTIFIABLE DISEASE	NUMBER OF CASES NOTIFIED													CASES ADMITTED TO HOSPITAL	TOTAL NUMBER OF DEATHS
	At all Ages	At ages—Years													
		Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	10 to 15	15 to 20	20 to 35	35 to 45	45 to 65	65 and over		
Whooping cough	84	4	13	13	10	6	35	3	..	..	..	..	..	1	..
Measles	48	1	1	4	6	1	18	10	3	2	1	1	..	1	..
Diphtheria	1	1	..	..	..	..	..	..	..	..	..	..	..	1	..
Ac. Pneumonia	5	..	..	..	..	..	..	..	..	2	1	1	2	..	..
Paratyphoid fever	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Dysentery	3	1	..	..	..	..	..	..	..	1	1	1	..	1	..
Scarlet fever	3	..	..	1	..	..	1	..	..	..	..	1	..	1	..
Ac. Poliomyelitis	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Totals	146	7	14	18	16	7	54	13	4	5	3	3	2	5	..

TUBERCULOSIS.

Particulars of the new cases of tuberculosis reported during the year and of deaths from the disease in the District are set out in the Table below.

Age-Periods (Years)	NEW CASES				DEATHS			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M	F	M	F	M	F	M	F
0 to 1	..	..	..	..	..	..	..	..
1 „ 5	..	..	1	1	..	..	..	..
5 „ 10	..	..	..	..	..	..	..	..
10 „ 15	..	..	1	1	..	..	..	..
15 „ 20	..	1	..	..	..	1	..	..
20 „ 25	2	1	..	..	..	..	..	..
25 „ 35	5	3	1	..	..	3	..	..
35 „ 45	..	1	1	2	1	..	..	..
45 „ 55	..	2	..	..	..	..	..	..
55 „ 65	1	..	..	..	1	..	..	..
65 and upward	2	1	..	..	..	1	..	..
TOTALS	10	9	4	4	2	5	..	..

At the end of the year there were 114 cases on the Tuberculosis Register of the District. These were as follows :—

Males		Females	
Pulmonary	Non-pulmonary	Pulmonary	Non-pulmonary
34	27	27	26

Up to the present the housing position with regard to cases of pulmonary tuberculosis is that there are five such cases in which the family occupies unsatisfactory houses ; three cases are in definitely poor accommodation which, it is hoped, will shortly be replaced.



