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MALDON
Rural Sanitary District.

ANNUAL REPORT
OF THE
MEDICAL OFFICER of HEALTH

FOR

✦ 1896, ✦

BY

JOHN C. THRESH, D.Sc., M.D., D.P.H.

Maldon:

PRINTED BY RICHARD POOLE, BOOKSELLER AND STATIONER, HIGH STREET.

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MALDON RURAL SANITARY DISTRICT.

			Area in Acres.		Population 1891 Census.
TOLLESBURY	(11 Parishes)	...	35,166	...	7,464
BRADWELL	(5 „)	...	12,441	...	2,516
SOUTHMINSTER	(6 „)	...	21,915	...	4,766
MALDON	(11 „)	...	26,284	...	3,353
			<hr/> 25,806		<hr/> 18,099

To the Chairman and Members of the Maldon Rural
District Council.

GENTLEMEN,

I beg to present to you my Annual Report upon the District under your control, and in order to make it as intelligible as possible, it is divided into sections, as follows:—

- 1.—General Sanitary condition of the District.
- 2.—Sanitary Improvements effected during the year.
- 3.—Sanitary Improvements contemplated or in progress.
- 4.—Further Sanitary Requirements.
- 5.—Prevalence of Infectious Diseases during the year.
- 6.—Mortality Statistics.
- 7.—Appendix. Summary of Inspectors' Works.

Certain of these divisions necessarily overlap somewhat, but this is apparently unavoidable.

1.—General Sanitary Condition of the District.

Anyone unacquainted with the mortality statistics of the area under consideration would probably infer that certain portions of it—the marsh lands and the area where the London clay is exposed—must be naturally unhealthy on account of the cold, damp nature of the subsoil, and the difficulty of obtaining pure water in sufficient abundance. The various statistics which I have given from time to time in my reports in a measure support this view. Taking the last 15 years we find from Table VI. that the mortality has been generally higher in the parishes on the London clay, such as Cold Norton, Stow, Purleigh and Hazeleigh, and in the villages adjoining extensive Marshes as Tillingham and Southminster, than in the remaining portions. There are exceptions, however, and in comparing statistics so many points have to be taken into consideration in order to arrive at correct conclusions, that I do not wish to lay too much emphasis upon these figures, but it is worthy of note that it is in these districts that so much trouble is being experienced in providing adequate water supplies and satisfactory drainage.

In many villages there are old wooden or lath-and-plaster cottages barely fit for human habitation, and really incapable of being converted into healthy dwellings, and throughout the District defective cesspits and bumby nuisances are common. Very few private wells are properly constructed so as to adequately protect the water from contamination, and in certain parishes nearly all the wells yield a water which gives marked evidence of present and “previous” sewage contamination. Many parishes are very inadequately supplied with water, and the inhabitants have to depend in a great measure upon what they can purchase from the men who cart it round. A few of the larger villages require special reference.

Burnham. This parish, which has a public water supply and a system of sewers, has applied to the County Council to be formed into an Urban District. Doubtless the application will be granted.

Meanwhile, steps are being taken to improve the water supply by increasing the amount available, and the sewerage tanks have been reconstructed so as to admit of proper purification of the sewage before discharging it into the river. Portions of the sewerage system are defective. The house drains are, I am afraid, badly laid, and as nearly all the water closets are hand flushed, these are often found to be in an unsatisfactory condition. The ashes are collected by a public scavenger, who also has charge of the Waterworks and the Sewage Disposal Works. There is no doubt that he has more work than he can possibly do in a satisfactory manner.

At *Southminster* the demand for water from the public mains has been larger than anticipated, necessitating more continuous pumping. Upon gauging the springs at the end of the summer, they were found to yield as much as when the works were first constructed. Insanitary conditions abound in this village, and unless many improvements are made in connection with the privies, drains, sewers, &c., a more comprehensive system of sewerage will soon be necessary.

Throughout the whole District more systematic inspection for the discovery of nuisances is desirable. During the past year the Surveyor and Inspector has been more than fully occupied with the maintenance of the roads, and the planning and carrying-out of schemes for sanitary improvements in various parts of the District. As a Surveyor and Inspector has been appointed to take charge of the roads in, and act as Sanitary Inspector for the southern half of the District, doubtless more time will be given to inspection in the future.

On several occasions during the year the want of an Isolation Hospital has been markedly felt, although we have had no serious outbreak of infectious disease to chronicle.

The unloading and carting of London manure still occasionally gives rise to complaints.

II.—Sanitary Improvements effected during the year.

Steeple. Improvements have been effected in the drainage of several houses here, abating a serious nuisance which arose from a ditch receiving sewage. A bored well, standing near the road-side at the west end of the village, has been purchased and reconstructed. For this purpose the Local Government Board sanctioned a loan of £160. By deepening the reservoir an ample supply of water has been obtained, and the quality is excellent. The public pump at the opposite end of the village has also been overhauled and the surroundings improved.

At *Stow Maries*, *Purleigh* and *Fambridge*, the deep wells supplying the public pumps shewed signs of failing on account of the continuous fall in the water level. The reservoirs were deepened at Stow and Fambridge, and at Purleigh, where the well is sunk through its whole depth, the pumping engine was lowered about 10 feet. In each case the increased yield of water has proved satisfactory.

Tillingham. The water supply to this village has been improved by sinking two public wells to the North and South respectively, at the outskirts of the village where the subsoil water is little liable to pollution. The irrigation area gave rise to complaint early in the year. The sewage was said to seriously foul the Bradwell Brook. I examined the whole course of this stream, and found that the offensive matter complained of, and which was stated to be Tillingham Sewage, consisted entirely of fresh water algæ in a state of decay. Although the irrigation area was not working satisfactorily, I could find no signs of the sewage contaminating the brook. The land, however, has since been

re-drained, and will probably now continue to effectually purify all the sewage from the village for many years to come.

Burnham. The improvements at the sewer outfall have been completed, and the sewage is now treated with alumino-ferric and then run into a deep cylindrical tank, from which it flows into a series of four smaller tanks for further clarification. A considerable quantity of sludge deposits in the deep tank, and a thick scum forms on the surface of treated sewage. When working properly, a very clear and satisfactory effluent is produced, but the works require much more constant attention than they now receive. An arrangement should be made, if possible, with the tenant of the adjacent farm to remove the sludge at frequent and regular intervals.

Southminster. The sewage at one of the outfalls caused a serious nuisance near the Vicarage, and to remedy this the sewer has been extended some 100 yards.

Tolleshunt D'Arcy. The sewerage system here is at length completed, and the houses along the route of the sewer have been connected. The sewage is disposed of upon an area of ground about one acre in extent, which, on account of its heavy nature, had to be specially prepared to receive the sewage. The sewers are satisfactory, but it is too early to express any opinion upon the efficiency of the irrigation area.

Many nuisances have been reported during the year, and the abatement of a certain number secured. It has been decided to cause all the defective privies in Southminster to be converted into pail closets, and to appoint a man to act as scavenger. This will certainly greatly improve the sanitary condition of that parish.

Several gross cases of overcrowding have been reported, but in every instance the nuisances were abated without resorting to legal proceedings—one house has been reported by me as being unfit for human habitation. The nuisance arising at Burnham from the discharge of the sewage from the Coastguard ship “Kangaroo,” upon the beach, has been abated, the men now being housed on shore.

By special resolution of the Council it has been decided to adopt all such portions of the Public Health Acts Amendment Act, 1890, as are applicable to Rural Districts.

As the Register of Dairies, Milk Shops, &c., is very defective, advertisements are being issued in the local newspapers directing the attention of Dairymen and Cow-keepers to the requirements of the Bye-Laws.

Your Council has devoted a great deal of attention to improving the sanitary condition of the District, and with most encouraging results. The works above mentioned are only those which have been completed, and your Surveyor must be congratulated upon the satisfactory manner in which the work has been done. A considerable number of other projects have from time to time been discussed, and many, no doubt, will be carried out in the ensuing year. The chief are accorded in the following section.

III.—Sanitary Improvements in progress, or contemplated.

Isolation Hospital. The negotiations with the Town Council for the Borough of Maldon having led to no result, it has been decided to act independently of the Urban Authority. For Small Pox cases a large van is being constructed* in which to store and move the Hospital Tent and Furniture. When the tent is erected, the van will serve for the accommodation of the nurses. After great trouble and many disappointments, a piece of land, between three and four acres in extent, has been secured at Southminster upon which to erect a permanent hospital for the use of the Dengie Hundred and all the parishes to the south of the Blackwater. The

* The Van is now completed.

ground is in every way suitable, is near the public water main, and offers complete facilities for disposal of the sewage. It is also within easy reach of a medical attendant. The Surveyor will, I hope, be instructed to prepare plans for a small hospital, and a formal application be made to the Local Government Board for permission to borrow the money requisite for its erection. I have examined one or two sites for a hospital to the north of the Blackwater, but, as yet, I have not found one which was both suitable and available. I am strongly of opinion that the Maldon Port, Urban, and Rural Authorities should provide a joint Hospital near Heybridge, for the use of the Port, the Borough, and the northern portion of the Rural District, and notwithstanding the failure of previous negotiations, I would recommend another attempt being made to effect a combination for this purpose.

Water Supplies. The town of Burnham is somewhat rapidly increasing in population, and one or two plots of ground have recently been divided into lots and sold for building purposes. The present supply of water is inadequate, but it appears very probable that the yield from the subsoil at the waterworks may be considerably increased by sinking a series of tube wells. One tube has already been driven and yields several thousands of gallons of water per day without any apparent diminution of the yield in the old well. If further pumping proves this additional yield to be constant, it is proposed to drive two to four similar tubes, and connect them all with the pumping main. An extension of the water mains here is also contemplated. The sewerage system is also about to be extended and improved.

At *Southminster* the demand for water has exceeded our anticipations, a malting and the Railway Station using considerable quantities. This necessitates pumping twice daily. The reservoir into which the springs flow holds about 12 hours' yield. By increasing this storage, pumping once a day would be sufficient to meet the present demand. Some additional stand pipes have been

erected during the year, rendering the water available for many cottages in the outskirts of the village.

At *Althorne* attempts are being made to find water for the supply of the village, but, as yet, with only a limited measure of success.

At *Cold Norton* an old bored well has been re-opened. So far as can be learned the well originally yielded a very good water, but after a time the quality changed, and it became too hard to be usable for domestic purposes. Upon examination, I concluded that this hardness was due to sulphate of lime and magnesia present in veins in the London clay here, and that if this could be kept out the water would resume its pristine character. The well was therefore pumped dry, the bore tube shelled, and a sample of water which rose from the bottom collected. This, upon analysis, proved to be very pure and soft. Unfortunately, when the work was suspended the bore-tube was not plugged, and now the water from the upper portion of the well gravitates downwards into the sand beneath the clay. By re-lining the tube and properly reconstructing the sunk portion of the well doubtless a pure water will be obtained. It is proposed to do this, as the well would be of great service to the parish.

The comprehensive schemes for supplying Purleigh, Hazeleigh, Woodham Mortimer, Cold Norton and other parishes with water, which was fully dealt with in a special report prepared by the Surveyor and myself, were considered too expensive, but the more economical one, that of supplying the water by gravitation from springs at Danbury, would probably have received further consideration had not the Chelmsford District Council stepped in and acquired power to purchase the springs compulsorily. I am still of opinion that the £4000 or £5000 necessary to supply water to these parishes would be money well spent. The population at present depends upon a few deep wells and ponds and ditches. In many parts the water is purchased from men who cart it round.

Many districts in the county, with fewer natural advantages, are being developed, and if to the other advantages that of a good public supply of water was added, it is tolerably certain that in a very few years several estates would be divided up for building purposes, and the parishes would become more prosperous. Probably, if some of the landowners who would be chiefly benefited were approached, some arrangement could be arrived at which might make a comprehensive scheme possible.

At *Tollesbury* the sewer outfall is to be improved, and some form of sewage treatment adopted. The sewerage system is to be extended in order to enable a number of houses which have recently been erected to be connected therewith.

To ensure the more systematic inspection of the District, the parishes have been divided into small groups, and the Inspectors have been requested to report upon dairies and cowsheds, slaughter houses, and the general sanitary condition of one group in each of the two districts under their charge at each monthly meeting. A special form for reporting is being drawn up by the Clerk. If this programme be adhered to the efficiency of the sanitary administration will be greatly increased.

IV.—Further Sanitary Requirements.

The nature of these may fairly be inferred from the preceding sections, and it is gratifying to be able to record that all the more urgent matters, such as the provision of isolation hospitals, improved works of sewerage and water supply, are now receiving careful attention.

The disposal of the sewage from Burnham and Tollesbury has special importance since near both places there are important Oyster Layings. Referring to Tollesbury, the Local Government

Report on "Oyster Culture in Relation to Disease," says that from the main outfall "it is possible, and indeed, probable, that after heavy rain the flushing of the sewer might tend to the sewerage being visible in the water of the creek for a considerable distance." To prevent this, the improvements above indicated are to be proceeded with. At Burnham, in the same report, the sewage from the town is said to be "the main pollution of the River Crouch," and that "the proximity of the outfall to the private layings would appear compromising to the oysters there situated." The reporter, however, has been kind enough to state that since his visit your Council has "taken the steps which Dr. Thresh deemed necessary to purify this effluent." This is in the main correct, but I wish to record that my recommendation included the chemical treatment of the sewage, clarification by subsidence in deep tanks, and, if necessary, final purification by filtration. The works, though completed, have never been really systematically attended to. At first a clear and satisfactory effluent was produced without filtration, but since then I have always found the tanks more or less foul, and the effluent not what could be considered satisfactory. It is very probable that filtration will have to be added, but before recommending this, the present arrangement should receive a fair trial. The tanks should be carefully attended to, the sludge pumped out and removed twice a week, or even oftener if found necessary. If the result then is not sufficiently satisfactory, coke breeze filter beds can be added as the tanks were designed for this purpose. The oyster merchants of Burnham, and the inhabitants generally are now fully alive to the importance of these works, and are determined to do all that is necessary to place the Crouch oysters above suspicion. I may add that I recently examined a batch of such oysters from the town layings, and could not find any indication of sewage matter either on or within the shells. The improvements contemplated at Tollesbury will also place the layings there beyond suspicion.

Whilst referring to the Local Government Report the following extract may be worth quoting. "At Heybridge, opposite Maldon, a large portion of the sewage of Heybridge passes into a creek

which shortly afterwards joins the Blackwater. At one point along this creek are a number of privies discharging direct on to the foreshore, a condition of affairs which should receive the serious attention of the Maldon Rural District Council. At Heybridge Basin a small group of houses discharges sewage direct into the Blackwater." The sewage which passes into the tidal river or estuary from the Rural District is exceedingly small compared with that from the Borough of Maldon, but as both discharge into the estuary 12 miles from its mouth and 10 miles from any oyster layings, and the estuary has a width from 2 to 3 miles, the pollution is infinitesimal. The sewerage of Heybridge, however, is capable of much improvement, but the place lies so low that any general system of sewerage would necessitate pumping, or the provision of large storage tanks, involving a considerable expenditure. Some time ago I reported upon the foul condition of the creek and advocated the removal of the privies discharging directly into it. The Council caused the creek to be cleansed, but left the privies, as no nuisance was complained of by the users, and the houses have no gardens upon which the fæcal matter could be disposed. Pail or earth closets could be substituted if some arrangement were made for periodical removing and cleaning the receptacles.

At *Goldhanger* there are ditches which become offensive every summer on account of sewage stagnating therein. A committee met here some two years ago, and made certain recommendations, but these have not yet been acted upon.

At both *Upper* and *Lower Althorne* there are serious nuisances arising from a similar cause. In the higher portion of the parish many cottages have no garden or back yards, and I again recommend that an attempt be made to obtain ground at the back (as has been done at *Steeple* and *Latchingdon*), so that the privies can be removed further from the cottages, &c.

The Bye-laws referring to the removal of house refuse, cleansing of privies, &c., are not enforced with sufficient strictness. The

building bye-laws are receiving more attention, but builders, either through negligence or deliberate intention continue to infringe them.

V.—Prevalence of Infectious Diseases.

The total number of cases notified during the year was only 70.

28 cases of Scarlet Fever,
 14 „ Diphtheria,
 16 „ Typhoid Fever,
 1 case of Puerperal Fever,
 11 cases of Erysipelas.

Year by year the number of cases notified has decreased, and so far this is very satisfactory. But it is a matter for regret that Typhoid Fever should be the only disease which gives no evidence of decreasing prevalence. (*Vide* Table V.) Whooping Cough and Measles have been prevalent in certain parishes, but fortunately, the mortality therefrom was very low. No case of Small Pox occurred during the year.

Scarlet Fever. An outbreak occurred in Tolleshunt D'Arcy in the Spring. The first case occurred at an isolated farmhouse, and the source of infection could not be traced. It was not recognised, unfortunately, until other children had been attacked. At Althorne, where a number of cases had occurred in 1895, a succession of isolated cases occurred during the past year in various parts of the parish. They were exceedingly mild in character, and there is little doubt that the infection was spread by unrecognised cases.

At Stow Maries an unrecognised case spread the disease. In one instance the infection was apparently carried by some rags taken from an infected house.

The age and sex distribution of the whole of the cases was as under :—

	Under 1 Year.	1—5	5—10	10—15	15—25	25—40	Total.
Males	—	1	3	1	1	1	7
Females	—	3	9	8	2	2	24

Diphtheria and Croup.

Only one case of Croup was notified. It occurred in January, at Goldhanger, and proved rapidly fatal.* Death was certified to be due to "Laryngitis." Upon investigating this case I found there had been an epidemic of some throat affection, limited to very young children, and which caused four deaths within a week.

Name.	Age.	Death certified due to.	Died.
A. K. E.,	6 years.	Acute Bronchitis.	Jan. 13.
W. S.	16 months.	Acute Bronchitis.	Jan. 17.
A. S.	18 months.	Bronchitis.	Jan. 18.
G. C. E.	4 years.	Laryngitis.	Jan. 19.

So far as I could learn there had been 12 cases, all with one or two exceptions having been attended by a medical man of wide experience. No membrane was visible in any instance, and the patients were considered to be suffering from Bronchitis. When the fourth death occurred the possibility of the disease being Diphtheritic Croup suggested itself, and the case was notified. Death, however, was certified to be due to Laryngitis. Fortunately, no further cases occurred, and I could only find one child (aged 5 months) actually suffering from the disease, and it was too ill to examine, though it finally recovered.

I could find no history of Diphtheria, or of the introduction of infection. The first patient (A. K. E.) had had a cold for about two days, but no notice was taken of it. During the night of the 12th, she was suddenly attacked with difficulty of breathing, and

* In fact, the child was dead when the notification reached me on January 20th.

died the following evening. On the day of her death a younger brother (G. C. E.) was observed to have a slight cold and cough. Respiration became affected, and he died on the 19th. There were several other children in the house, but they remained well.

On January 13th, a child (A. S.) aged 18 months, appeared to have a cold. Next day the breathing became difficult. The discharge from the nose became purulent and offensive. She died on the 18th. The medical attendant was only sent for when the child was moribund, and it had died before his arrival.

On January 16th a child (W. S.) aged 16 months, living in a cottage near, was taken suddenly ill (difficulty of breathing) and died the following day.

In all the cases the patients first exhibited the symptoms of a common cold, then, more or less suddenly, difficulty of breathing ensued, finally ending in death or recovery. No membrane was observed in any of the cases examined. No casts were coughed up. In only one case was there any purulent discharge, and in only one was there any glandular enlargement. The medical attendant considered the series of cases as a "coincidence."

No outbreak of Diphtheria occurred during the year. The 13 notified cases were spread over the district and throughout the year. Several of them, when viewed by the light of a bacteriological examination and their subsequent history, could not be regarded as true Diphtheria. In 5 instances the attacks were probably attributable to the effluvia from filth, (1, ditch nuisance, 2, manure heap ; 3, defective cesspit near house ; 4, privy connected with kitchen ; 5, sink waste connected directly with drain). One case followed an attack of Measles. Another resembled closely the cases recorded above, which occurred at Goldhanger, and the

patient had died before the notification reached me. No other cases occurred there.

The age and sex distribution is as under :

	Under 1 Year.	1—5	5—10	10—15	15—25	25—35	35—55	Total.
Males —		2	2	0	1	1	1	7
Females—		1	2	2	0	1	1	7

Typhoid Fever.

At the end of 1895 there were cases of Typhoid Fever in three cottages at the west end of the village of Steeple. During the first quarter of 1896, five other cases occurred in the same cottages, and a sixth in an adjoining house.

In September, the infection was introduced into Howe Green, Purleigh, by a girl who came from Southend suffering from the disease (in its early stage). Three others in the same house were attacked and a child in a cottage near.

Two cases occurred in the Autumn in Burnham (mother and daughter). The drains were defective, occasionally getting blocked, and causing a nuisance. It is noteworthy, however, that when the first patient was attacked there were several cases of malarial fever in the parish, and the diagnosis for a time was obscure. In the malarial cases there was very marked enlargement of the spleen, otherwise they would have been regarded as Typhoid. My impression, derived, however, from a single case, was that the disease resembled that often met with in malarial countries, and designated “Typho-malarial Fever.”

Only one case of Puerperal Fever was notified during the year.

The age and sex distribution of the cases of Typhoid Fever was as under :

	Under 1 Year.	1—5	5—10	10—15	15—25	25—45	Over 45	Total.
Males	—	0	3	1	0	3	0	7
Females	—	0	1	4	2	1	1	9

At Bradwell a little alarm was caused by the spread of an infectious skin disease amongst the children attending the National Schools. It proved to be Impetigo Contagiosa. The worst cases were excluded from school, and the parents were given advice as to the necessity for care and general cleanliness. The disease was soon eradicated.

VI.—Mortality Statistics.

Table I. The birth rate for the year is 27.5 per 1000, which, though higher than last year, is about the average for the last five years.

The total number of deaths recorded in the district during the year was 242, but to these must be added the deaths of 19 paupers, which occurred in the Union Workhouse. The total of 261 gives a death rate of 14.3 per 1000 on a population estimated at 18,200. This is a lower rate than any of which I can find a record.

The infantile mortality has again been high, and it certainly appears as if this was not accidental but the expression of a tendency to increase. Last year I suggested that this was probably due to the more robust of the rising generation leaving the district only the less robust remaining.

The Zymotic death rate 1.1 is very low. It is noteworthy that not a single death was recorded from Diarrhoea.

Table II. The variations in the death rates for the different registration districts are not so marked as to require comment.

Tables III. & IV. are on the official forms supplied by the Local Government Board. The former shews the number of deaths from various diseases, and the latter the number of cases of infectious diseases notified in each of the sub-registration districts. The small number of cases notified from the Bradwell District is not exceptional. It is probably due to its isolated condition, having the sea on one border, and the broad estuary of the Blackwater on another.

Table V. This Table gives a monthly summary of the statistics together with certain meteorological data. January is seen to have been the month of highest mortality, whilst July, August and September may be said to have been the healthiest months.

Table VI. Too much importance must not be attached to this Table, especially to the column giving the death rates for the past year. The population of each group is so small that accidental causes produce great variations. These variations neutralize each other in the course of years. For this reason the figures in the second column are of much greater significance, since they give the mean death rates for the last 15 years, but why Asheldham Dengie and St. Lawrence should persistently have such a low death rate, as compared with all the surrounding parishes, is very difficult to explain.

Table VII. This Table enables the actual number of births, deaths, &c., which have been recorded during the past seven years, to be compared. Amongst other things it shews that Measles

and Whooping Cough caused many deaths in 1892, and as we know that these diseases shew a very marked tendency to become epidemic every few years, we may expect such a recurrence in the immediate future. During the past four years nearly 2,000 children have been born in the district, of which about 300 have died. The great majority of the remainder are exceedingly susceptible to the infection of both these diseases, hence epidemics may easily occur. The Table also shews that Phthisis is continuously and markedly declining. As this disease is in a great measure preventible, being fostered by overcrowding, defective ventilation, and damp dwellings, the decrease tends to shew that such conditions are yearly becoming less prevalent, in other words—that the district is reaping the benefits of the sanitary reforms which have been effected. In fact, the whole tenour of this report is of an encouraging character, and we may reasonably hope that the further efforts of the Council to improve the sanitary conditions of the District will be equally successful.

I have the honour to be, Gentlemen,

Your obedient Servant,

JOHN C. THRESH

MALDON RURAL SANITARY DISTRICT.

TABLE I.

Birth and Death-Rates and Infantile Mortality during
1896, compared with previous years.

PERIOD.	Per 1000 Population.			Infantile Mortality. Deaths of Infants under 1 year, per 1000 Births.
	Birth-rate.	Death-rate. All Causes.	Death-rate. Seven Zymotic Diseases	
1896	27.5	14.3	1.1	110
1895	24.1	14.9	1.2	107
1894	28.9	16.1	.94	90
1893	27.7	14.75	1.7	90
1892	26.8	16.9	2.3	118
1891	29.7	16.3	.83	95
1890	29.8	16.9	1.99	111
1881-90	30.6	15.1	1.53	90

TABLE II.

SUB-REGISTRATION DISTRICTS.

DISTRICT.	1896.			1881-95.		
	Death Rate.	Zymotic Death Rate.	Infantile Mortality.	Death Rate.	Zymotic Death Rate.	Infantile Mortality.
Southminster	12.6	0.6	96	15.6	1.7	95
Bradwell	15.5	0.4	98	14.1	1.0	82
Maldon	14.3	1.8	105	16.5	1.2	97
Tollesbury	14.9	1.3	129	14.6	1.3	89

TABLE III.

TABLE OF DEATHS during the year 1896, in the Rural Sanitary District of Maldon, classified according to Diseases, Ages, and Localities.

MORTALITY FROM ALL CAUSES, AT SUBJOINED AGES										MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER 5 YEARS OF AGE																
Sub-registration District	At all ages	Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and up- wards.		1	2	3	FEVERS.			6	7	8	9	10	11	12	13	14	15	16	Total
												Enteric or Typhoid	Con- tinued	Puer- peral												
SOUTHMINSTER..	55	13	1	2	3	12	24	Under 5	—	—	—	—	—	—	—	—	—	—	—	—	3	—	1	—	10	14
							5 upwards	—	—	2	—	—	—	1	—	—	—	—	2	7	6	1	—	—	22	41
BRADWELL	36	7	2	1	1	10	15	Under 5	—	—	—	—	—	—	1	—	—	—	—	—	3	—	—	—	6	9
							5 upwards	—	—	—	—	—	1	—	—	—	—	—	—	1	11	1	—	—	13	27
TOLLESBURY	108	24	13	2	7	28	34	Under 5	2	—	—	—	—	—	2	—	5	—	—	—	15	—	—	1	11	37
							5 upwards	—	—	—	—	—	—	—	—	—	—	—	5	9	11	3	2	41	71	
MALDON	43	9	2	5	3	7	17	Under 5	—	1	—	—	—	—	—	—	4	—	—	1	—	—	—	—	5	11
							5 upwards	—	—	1	—	—	—	—	—	—	—	—	1	7	6	1	4	11	32	
TOTAL.....	242	53	18	10	14	57	90	Under 5	2	1	—	—	—	2	1	9	—	—	—	—	22	—	1	1	32	71
							5 upwards	—	—	3	—	—	2	1	—	—	—	—	8	24	34	6	6	87	171	

The subjoined numbers have been taken into account in the above records of mortality.

Deaths occurring outside the district among persons belonging thereto, in Union Workhouse.	19	2	—	—	—	—	17	Under 5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2
Deaths occurring within the district among persons not belonging thereto.	—	—	—	—	—	—	—	Under 5	—	—	—	—	—	—	—	—	—	—	—	3	—	—	—	—	14	17

TABLE IV.

TABLE of POPULATION, BIRTHS, and of NEW CASES of INFECTIOUS SICKNESS coming to the knowledge of the Medical Officer of Health, during the year 1896, in the Rural Sanitary District of Maldon.

SUB-REGISTRATION DISTRICT.	Population at all Ages.		Registered Births.	AGE.	New Cases of Sickness in each Locality coming to the knowledge of the Medical Officer of Health.												
	Census 1891.	Estimated to middle of 1895.			Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	FEVERS.						Cholera.	Erysipelas.	Totals.
									Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.				
SOUTHMINSTER	4766	4864	136	Under 5	—	1	—	—	—	—	—	—	—	—	—	1	
				5 upwards	—	10	1	—	—	—	9	—	—	—	3	23	
BRADWELL ...	2516	2516	82	Under 5	—	—	1	—	—	—	—	—	—	—	—	1	
				5 upwards	—	—	—	—	—	—	—	1	—	—	2	3	
TOLLESBURY ...	7464	7470	194	Under 5	—	1	1	1	—	—	—	—	—	—	1	4	
				5 upwards	—	8	6	—	—	—	1	—	—	—	2	17	
MALDON ...	3353	3350	86	Under 5	—	2	—	—	—	—	—	—	—	—	1	3	
				5 upwards	—	6	4	—	—	—	6	—	—	—	2	18	
TOTALS ...	18099	18200	498	Under 5	—	4	2	1	—	—	—	—	—	—	2	9	
				5 upwards	—	24	11	—	—	—	16	—	—	—	9	61	

The "Notification of Infectious Disease" has been compulsory since 1890. There is no Isolation Hospital in the District.

TABLE V.
Maldon Rural Sanitary District.
Table of Meteorological Data, Deaths, Infectious Diseases, &c., for Year ending Dec. 31st, 1896.

1896	Meteorological Data.					Deaths, all Causes.			Deaths from Zymotic Diseases.							Infectious Diseases Notified.						
Month.	Mean Temperature	Mean daily range of Temperature	Relative Humidity.	No. of Rainy Days.	Rainfall.	Total Deaths.	Under 1 Year.	Over 65 Years.	Smallpox	M. Group and Diphtheria.	Fevers.	Diarrhoea.	Erysipelas.	Whooping Cough.	Measles.	Total.	Small Pox.	Scarlet Fever	Croup and Diphtheria.	Fevers.	Erysipelas.	Total.
January	39.35	10.3	93	11	.70	40	4	19	—	2	1	—	—	—	—	3	—	—	3	2	1	6
February	38.75	12.3	89	8	.63	20	5	11	—	—	—	—	—	—	—	—	—	2	—	2	1	5
March	44.75	13.9	84	22	2.96	25	3	11	—	—	—	—	1	—	—	1	—	5	1	2	1	9
April	47.75	18.3	79	7	.59	22	5	8	—	—	—	—	1	2	—	3	—	3	—	1	2	6
May	52.95	23.2	66	8	.21	20	6	7	—	—	—	—	—	—	—	—	—	—	1	—	—	2
June	63.3	23.15	68.3	9	3.33	20	3	8	—	1	—	—	—	—	—	1	—	—	1	—	—	1
July	63.75	25.3	66.0	7	.59	16	5	5	—	—	—	—	—	4	1	5	—	—	1	—	—	1
August	58.45	18.5	73.0	12	3.05	12	3	4	—	—	—	—	—	1	—	1	—	3	—	—	—	3
September	56.9	12.46	85.5	20	5.04	16	2	7	—	—	1	—	—	1	—	2	—	—	2	2	2	6
October	45.4	14.2	90	17	2.79	22	6	10	—	—	—	—	—	—	—	—	—	2	4	1	1	8
November	38.9	12.32	88	10	1.13	22	7	6	—	—	1	—	—	—	—	1	—	11	1	5	0	17
December	37.91	10.22	94	19	3.08	26	6	11	—	—	1	—	1	1	—	3	—	2	—	2	2	6
1896	49.01	16.18	81.3	145	24.10	261	55	107	—	3	4	—	3	9	1	20	—	28	14	17	11	70
Means	48.2	17.2	83.8	144	18.43	270	47	116	1	7	4	6	—	—	3	21	8	37	34	14	5	98
and	47.1	15.7	83.7	197	24.34	292	46	123	3	6	4	—	1	4	—	18	15	32	17	10	14	88
1893	49.8	18.5	81.3	150	20.21	266	45	109	—	7	5	9	2	1	8	32	1	75	57	17	14	164
Totals	47.2	16.55	84.3	162	24.32	306	56	117	—	7	1	6	1	19	12	46	—	11	128	13	12	164

NOTE.—No death has occurred from Scarlet Fever for the past five years.

TABLE VI.
DEATH-RATES IN THE PARISHES, 1896.

PARISHES.			1896	DEATH RATE.—Mean for 15 years, 1881—95.		Population '91.
			All causes.	All Causes.		
1	Asheldham, Dengie, and St. Lawrence	...	7.7	9.9	648	
2	Tollesbury	...	15.4	12.4	1608	
3	Langford and the Tothams	...	12.1	15.3	1238	
4	Heybridge	...	16.6	15.0	1621	
5	Tillingham	...	14.7	16.5	951	
6	Woodham Walter and Mortimer	...	16.5	16.3	789	
7	Cold Norton, Stow, Purleigh, and Hazeleigh	...	16.8	17.7	1309	
8	Bradwell-on-Sea	...	23.2	16.2	905	
9	Cricksea, Althorne, and Mayland	...	7.8	16.4	643	
10	Goldhanger and Tolleshunt D'Arey	...	16.5	15.2	1336	
11	Southminster	...	15.3	16.9	1303	
12	Ulting, Wickham Bishops, Great and Little Braxted	...	14.2	15.4	1124	
13	Burnham	...	12.8	15.0	2336	
14	Tolleshunts Major and Knights	...	13.6	14.3	885	
15	Steeple, Latchingdon, Mundon, and North Fambridge	...	11.2	16.3	1338	

TABLE VII. MALDON RURAL SANITARY DISTRICT.

TABLE shewing the Total Number of BIRTHS and DEATHS, also the Number of Deaths at various ages and from various diseases, each year, from 1890 to 1896.

YEAR.	BIRTHS	Total Deaths.	Under 1 yr.	1 to 5	5 to 15	15 to 25	25 to 65	Over 65	Smallpox.	Diphtheria.	M. Croup.	Typhoid Fever.	Continued Fever.	Puerperal Fever.	Erysipelas.	Measles.	Whooping Cough.	Diarrhoea.	Total Zymotic Diseases.	Phthisis.
1890	540	307	60	29	19	12	68	119	—	4	3	7	—	—	2	1	19	—	36	30
1891	536	294	51	19	10	17	65	132	—	4	1	1	1	1	—	3	3	1	15	23
1892	463	307	56	38	14	12	69	118	—	6	1	—	1	—	1	12	19	6	46	21
1893	500	266	45	23	15	14	60	109	—	5	2	3	—	2	2	8	1	9	32	18
1894	522	292	46	19	12	13	79	123	3	4	2	4	—	—	1	—	4	—	18	21
1895	438	270	47	18	14	10	65	116	1	7	0	3	—	1	—	3	—	7	22	18
1896	498	261	55	18	10	14	57	107	—	2	1	3	—	1	3	1	9	—	20	10
Mean for 7 years.	499	285	51	23	13	13	65	118												

Summary of Work done through the Sanitary Inspector in the Rural Sanitary
District of Maldon during the year ending 31st December, 1896.

	Total No. for year.	Results of Inspection, &c.
1 Complaints received	57	This applies to nuisances detected by the Inspector of Nuisances.
2 Nuisances detected	161	
3 Nuisances abated	104	
4 Notices served	3	
5 Summonses taken out	0	
6 Convictions	0	None in District.
7 Cottages inspected	523	
8 Lodging-houses inspected ..	0	
9 Slaughter-houses inspected ..	8	
10 Bake-houses inspected	14	
11 Dairies & milk shops inspected	12	No list received from Factory In- spectors.
12 Cowsheds inspected	17	
13 Workshops inspected	0	
Filthy houses cleansed, sec. 46 Public Health Act, 1875 ..	0	
15 Houses disinfected	37	
16 Overcrowding abated	3	
17 Houses placed in habitable repair	18	
18 Houses closed	1	
19 Houses erected or re-built ...	59	
20 "Certificates" granted	0	
21 " " deferred	0	
22 Wells sunk or improved supplies of water afforded	9	
23 Wells cleansed or repaired ..	6	
24 Wells closed	1	
25 Houses connected with sewers	135	
26 " " with water mains	53	}
27 Earth, pail, or improved privies constructed or existing privies altered	111	
28 Privies & W.C.'s repaired; W. C.'s supplied with water ..		
29 Cisterns cleansed, repaired, or covered	0	
30 Animals improperly kept removed	4	
31 Samples of water taken for analysis	34	
32 Compensation paid for destruc- tion of infected bedding ..	0	
33 Seizures of unsound meat, &c.	0	

(Signed) HORACE G. KEYWOOD.

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