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BOROUGH OF EASTBOURNE



ANNUAL REPORT

For 1896, on the

Health of Eastbourne,

Vital Statistics, Sanitary Work, etc.

W. G. WILLOUGHBY, M.D., LOND.,

M.R.C.S. Eng., L.R.C.P. Lond; Diplomate in Public Health of London and Cambridge Universities.

MEDICAL OFFICER OF HEALTH.

EASTBOURNE:

Printed by H. J. Capon, Law Stationer, 75, Terminus Road.







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BOROUGH OF EASTBOURNE.

1896.

SITUATION.—Latitude, 50° 46' N.; Longitude, 0° 17' E.

ELEVATION OF THE AREA BUILT OVER.—Varies from 140 feet above (at West End) to 4 feet below high-water mark (in the East of the Borough).

SLOPE. - From West to East. ASPECT. - South and South-East.

Area.—Of the Borough, 5,410 Acres; of the Town (about) 1,000 Acres.

DENSITY OF POPULATION.—For the Borough 8.0 persons per acre; for the Town, 43.

No. of Inhabited Houses .- At Census (April, 1891), 5,190.

POPULATION.—Census (1891), 34,969; Estimated at the middle of 1896, 43,500.

BIRTH-RATE.—21:12 per 1000.

DEATH-RATES.—Including all deaths, 10.43; and excluding deaths of visitors, 9.10 per 1000.

Zymotic total, 1.5; and from the seven principal zymotic diseases, 1.4 per 1,000.

Infantile Mortality, 114 per 1,000 births.

MEAN ANNUAL TEMPERATURE. -50.6.

Hours of Bright Sunshine Recorded .- 1941.7.

TOTAL RAINFALL.—32.68 inches.

To His Worship the Mayor, and to the Aldermen and Councillors of the Borough of Eastbourne.

GENTLEMEN.

I have the honour of submitting to you herewith my Third Annual Report on the Health of Eastbourne.

The year 1896, compared with other years, stands out conspicuously as having with 1894 the lowest death-rate on record. A death-rate of 10.4 per 1000 per annum is very satisfactory however favourable the natural conditions for a low death-rate may be.

The number of Notifications shews an increase, but this is due chiefly to a cause that was foreseen and against which the small section of people affected were forewarned. In one sense the increase is therefore all the more to be regretted, but it is satisfactory to know on the other hand that the illness need never have happened had the advice of the Sanitary Authority been attended to.

I regret that the provision of a satisfactory Common Lodging House is not yet an accomplished fact. The enlargement of the Sanatorium in 1896, although but of a temporary character, is satisfactory, especially in view of the fact that the Institution is so well appreciated by the inhabitants and visitors.

It is a striking fact that during 1896 no case of Scarlet Fever existed in the town as, without exception, every case notified was at once removed voluntarily and without any compulsion to the Sanatorium.

I beg to thank the members of the Sanitary Authority for their kindness, and to acknowledge with many thanks the thoroughness and cordiality with which I have been assisted in our increasing duties by the members of the Staff of the Department during the year.

I am, Gentlemen,

Your obedient servant,

W. G. WILLOUGHBY, M.D., Lond.

THE BOROUGH.

The Borough of Eastbourne consists of the civil parishes of Eastbourne and Norway. The acreage of the Borough is as follows:—

Eastbou	rne Parish		 4755
Norway	Parish		 655
	Total of the	Borough	 5410

Of the 4,755 acres in Eastbourne parish, 12 acres were water in 1891.

The name "Eastbourne" throughout this report refers to the Municipal Borough, i.e., Eastbourne and Norway parishes, and the statistics given apply to the Borough. It is necessary to explain this, as there are three other districts, viz., a registration district, a registration sub-district, and a parish also named "Eastbourne."

Although Norway is in some respects a separate parish, the deaths, births, &c., for the whole Borough are registered at one place, viz., at the Town Hall, and, in this report, Norway will be simply treated as part of the East Ward.

A large portion of the Borough, especially on the West and North, consists of agricultural and other land not occupied by houses. Of the total 5,410 acres, rather under 1,000 acres are built on and form the town. The area built on is surrounded by agricultural land or sea in all directions.

The Borough is divided into four wards and into eight Ecclesiastical sub-districts, as follows:—

WARDS.—East, Central, West, St. Mary's.

ECCLESIASTICAL PARISHES.—St. Mary's, St. John's, All Saints', St. Saviour's, Holy Trinity, All Souls', St. Anne's, and Christ Church.

For statistical and sanitary purposes I have used the division into wards as preferable for various reasons.

There were throughout 1896 three sanitary districts, assigned one each to the three Inspectors of Nuisances, as follows:—1, West, including the West and St. Mary's Wards; 2, East; and 3, Central, corresponding to the respective wards. It is probable that owing to the unequal increase in the respective wards, these sanitary districts must be re-arranged.

The principal institutions from a sanitary point of view are the following:—

The Borough Sanatorium in St. Mary's Ward.

The Union Workhouse and Infirmary in St. Mary's Ward.

All Saint's Convalescent Home in the West Ward. The Princess Alice Hospital in St. Mary's Ward.

SITE, SOIL, &c.

The Borough is situate on, and at the foot of, a slope running mainly from West to East.

The extent of ground covered by the town, considering its size and the number of houses, is a satisfactory characteristic of Eastbourne, the density of population being, as shewn later on, comparatively very small.

The highest point of the Borough on the Downs is about 590 feet above sea level, while the elevation of the portion covered by houses varies from about 150 feet above in the West to 4 feet below high water mark in the East. The Downs shelter the town from the West and South-west. The openness of the front of the Town to the South and South-east ensures a large amount of sunshine as is shewn by the sunshine record.

The geological survey shews much variation in the soil in the different parts of the Borough. Eastbourne is for the greater part on chalk, but there is some clay and a strip of upper green-

sand, which is narrow along the Grand Parade and widens as it passes from West to East to about Bourne Street, where it narrows again until it ends about half-a-mile East of the Pier. The remainder of Eastbourne in the East is on alluvium and on the beach.

Of the Four Wards, the whole of the West Ward and, with a very small exception, the whole of St. Mary's Ward is on chalk; the East Ward is to a small extent on chalk and greensand, but mainly on alluvium and shingle, the Central Ward is on chalk principally, but also on alluvium, and, to some extent, on greensand and clay.

In the valleys the chalk and greensand are covered by valley gravel.

Building is going on mainly in St. Mary's (West) and in the East Wards. In St. Mary's the sites now being built on are much more satisfactory than those in the East. It will be more satisfactory as far as sites are concerned if building increases in the Borough in Westerly and North-westerly rather than in Easterly directions.

METEOROLOGY.

The Meteorological Department is in the able hands of Mr. Sheward, and full details will be given in his interesting annual report. Certain meteorological data have been arranged in Table V of the appendix and a coloured chart is also given in the appendix by which some meteorological items are more clearly indicated than by figures only.

WATER SUPPLY.

The water supply of Eastbourne is still in the hands of a private company, but the Ratepayers and Owners of the Borough have, by a majority of over 1,000 on a poll taken in October last, declared themselves in favour of the acquisition of the Water

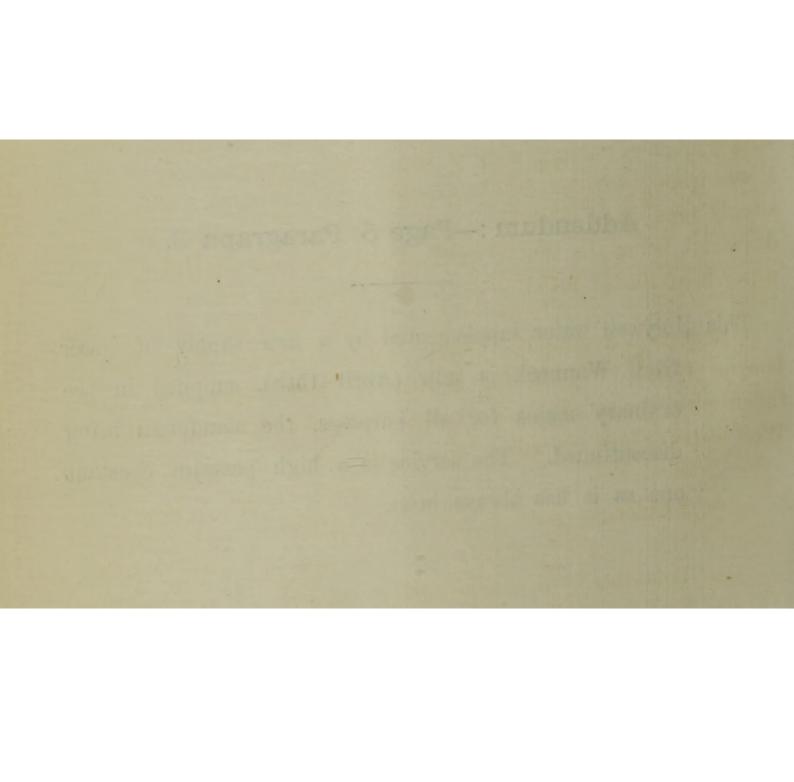
Works by the Corporation—hence a Bill has been deposited in Parliament for the carrying out of the wish of the Owners and Ratepayers. Early in the year 1896 the Corporation withdrew its petition against the Bill of the Water Company for increased powers, so that the Company might have no excuse for delay in supplying Eastbourne with water free from suspicion of salinity as soon as possible. The Company, however, has introduced a second Bill into Parliament for still more powers, thereby apparently condemning as insufficient the first Bill and the Bills of the Corporation and of the Company are now before Parliament.

The sources of Eastbourne water during 1896 were two as follows:—

- (a) Bedford Well. The water is pumped from a single well about 70 feet deep into service reservoirs on the hills; from these reservoirs the town is supplied. The well is situated in the upper greensand on the outskirts of the town near the junction of the chalk area with the alluvium of the marshes, and rather over half-a-mile in a direct line from the sea. From the well various more or less horizontal headings have been driven to collect and store the water, which has been obtained in abundant quantity for the successful maintenance of a constant supply. The stratum of greensand in which the well is situated is inclined upward towards the ground level, and reaches the surface within about a This well is to be abandoned as the chief quarter-of-a-mile. source of supply whether the Corporation or Company succeed in Parliament. The water in it, though otherwise of good quality, is somewhat saline.
- (b) Holywell. A varying quantity, possibly about half-a-million gallons daily, is obtained from this supply and mixed with the other water. This water was also as mentioned below supplied direct by stand-pipes for drinking, etc., after August 12th. This water is, at the time of going to press, now in the public mains for certain hours of the day—Bedford Well water for the remaining hours—a constant supply being kept up.

Addendum:--Page 5, Paragraph 3.

This Holywell water supplemented by a new supply of water from Wannock is now (April 15th), supplied in the ordinary mains for all purposes, the standpipes being discontinued. The service is a high pressure constant one as it has always been.



The salinity and hardness (most of which is consequent to the salinity) of the water are the objections to the present supply which has been constant, abundant and organically pure.

The salinity is not due to direct contamination by sea water. The salts are mainly Calcium and Sodium Chlorides, and the proportions of the salts in the water are utterly different to their respective proportions in sea water.

On August 12th, owing to the increasing salinity of the main supply, a new supply was on the urgent representation of the Corporation provided by the Company by stand-pipe. This new supply was from Holywell, and of excellent quality, its one drawback being the lack of quantity. A report of analysis of this water is appended, also one of the general supply.

Report on a sample of water from the Public Main, East-bourne (Bedford Well Water) September 22nd (this sample was taken when the salinity was about at its worst; even the Bedford Well water is now not saline to the taste):—

	Parts per 100,000.
* Chlorine	210.60
Total dissolved mineral matter	397.39
Free ammonia	0.0032
Albuminoid ammonia	0.0065
Oxygen absorbed from per-	
manganate in 15 minutes	0.0193
Ditto in four hours, both at	
80 F	0.0258
Total Solids, dried at 212 F	449.20
Loss on ignition	61.84
Mineral matter left on ignition	
Colour of water	Faint blue

^{*} Chlorine now (March 1st) 12gr. per gallon.

The mineral substances enumerated in the analysis occur, as far as can be stated, in the supply in the form of the following salts:

Sodium chloride	 	207.04
Magnesium chloride	 	35.12
Calcium chloride	 	91.78
Calcium sulphate	 	45.44
Calcium nitrate	 	3.77
Calcium carbonate	 	12.71
Silica	 	1.12
Oxide of iron	 	0.40
		397.38

* Hardness, calculated from above results: ... 171.1

The Analyst says of the sample "the water is of great organic purity," and it was taken when the salinity was about at its highest and when Holywell water was obtainable, i.e., water the report of analysis of which is given below.

Report on a sample of Holywell water of December 8th, 1896.:

100,000 parts were for	ound to	conta	in :
Chlorine			5.50
Sulphuric acid			1.12
Nitric acid			1.73
Phosphoric acid			none
Free Ammonia			0.0031
Albuminoid Ammo	onia		0.0048
Oxygen absorbed	from	per-	
manganate in	15 min	utes	0.0028
Ditto in four hou	rs, both	at	
80 F			0.0112
Total solids			36.40
Loss on ignition			1.84
Hardness (total)	16 " de	gress	Clark "

^{*} Now about 25 instead of 171.

This is a very good sample of water in every way. Organically it is exceptionally pure and the amount of mineral matter is moderate.

POPULATION.

The census year *i.e.* 1891, is so far past that it is difficult to form an absolutely correct estimate of the number of the population of any district, especially such a district as Eastbourne, whose population is comparatively small, has increased in very unequal proportions in the various intercensal periods and has been particularly liable to unequal fluctuation.

The Registrar General's method of estimating population is based on the assumption that the rate of growth of population is still the same as it was in the previous intercensal period, and though this is liable to inaccuracy through various fallacies it is the most reliable method as a rule. By this method the population in the middle of 1896 was 44,586, that is to say, that if the population of Eastbourne increased after 1891 at the same rate as it increased from 1881 to 1891 the population in the middle of 1896 was 44,586.

It is likely, however, that the population has recently not increased so rapidly as it did between 1881 and 1891, and therefore for this and other reasons the population at the middle of 1896 has been taken as 43,500, and this is certainly a more correct estimate. The reason for obtaining as correct an estimate as possible in a report such as this is that on its correctness depends the correctness of the estimated birth rates, death rates, &c. The births, deaths, &c., being constant, any increase of estimated population lowers the estimated rates and vice versa. By taking a lower figure by 1086 than the Registrar General's estimate, the rates are raised and therefore in the case of the death rate for instance the worst is given and the death rate not made out any lighter than it really is. In this estimate of 43,500, visitors are not included, except in so far as they were by the April, 1891, census in the death rate, however, their deaths are included unless the con-

trary is expressly stated, so that here again the worst of the rate is known and not suppressed. This is referred to since watering places are accused, and often justly, of "manufacturing" low death rates for their returns by calculating on unduly high populations and by excluding deaths of visitors, though including their numbers in the population.

Between 1881 and 1891 the population increased about twice as much by excess of immigration over emigration as by excess of births over deaths or natural increase. If this continued in 1891 the natural increase being 465, the total increase of population over 1895 would be about three times 495, or 1395. By these and other methods such as calculation based on the number of houses, &c., it may be fairly deducted that the population in the middle of 1896 was rather less than it would be by the Registrar General's estimate, viz.: 44,586; and it may be fairly taken to have been about 43,500.

SEX CONSTITUTION OF THE POPULATION.

The sex constitution of the population of Eastbourne for 1896 is calculated on the supposition that the comparative rates of increase of the sexes still continue as in 1881—1891, when the males constituted 35.55 per cent., and the females 64.45 per cent., of the total increase of population in the ten years.

The following table shews the sex constitution of the population calculated in this way.

Year.	Males, Total.	Per- centage.	Females, Total.	Per- centage.	Total.	Excess of Females.
1881	10,060	45.7	11,954	54.3	22,014	1,894
(census) 1891	14,665	41.9	20,304	58 1	34,969	5,639
(census) 1896 (estimated)	17,698	40.4	25,802	59'3	43,500	8,104

It is improbable that this decrease in percentage of males compared with females has been continually going on at the same rate, but the above fairly represents the proportion of the sexes.

The causes of the great preponderance of women in Eastbourne are the usual causes of excess of females at health resorts, principally the absence of occupation and means of obtaining livelihood for males as compared with those of females.

If the males and females of Eastbourne remain in the same proportion as they were in 1891, the numbers for 1896 would be 18,227 and 25,273 respectively. The numbers according to the table more nearly represent the correct division than these do.

AGE CONSTITUTION OF EASTBOURNE POPULATION.

The following table gives the 1891 and 1896 population of Eastbourne sub-divided according to age groups. The estimates for 1896 are calculated according to the tables given in the 1891 census report of the Registrar-General. The estimate of the sexes at various ages is only approximate.

Ages.	C	ensus, 189	r.	Estimated, 1896.		
nges.	Males.	Females.	Total.	Males.	Females.	Total.
oI	344	387	731	417	492	909
I-5	1354	1422	2776	1639	1813	3452
Total under 5	1698	1809	3507	2056	2305	4361
5—15	3727	3685	7412	4517	4702	9219
15-25	2848	5161	8009	3421	6542	9963
25-65	5786	8771	14557	6974	11138	18112
65 and upwards	606	878	1484	730	1115	1845
Totals	14665	20304	34969	17698	25802	43500

The percentage composition of the population of Eastbourne at different groups of ages is as in the following table. The

figures for England and Wales are added for comparison, and the figures for 1891 are chosen, since they are exact.

Age Groups.	Eastbourne, per cent.	England and Wales, per cent.
Under 5 years of age	10.03	12 25
5—15	21.19	22.82
15-25	22.90	19.29
25-65	41.63	40.89
65 and upwards	4.24	4.72

The age and sex constitutions of a population have an important bearing on the death and other rates. As regards sex Eastbourne has an abnormally large proportion of females, hence the death rate for instance should be somewhat lower in consequence.

As regards age Eastbourne is, as can be seen by the above table, on the whole, in very much the same position as England and Wales generally. In the period of very small death rate, viz., from 5—15, Eastbourne has a smaller percentage of population, this is, however, more than counterbalanced by the smaller percentage of population in the under 5 years of age group in which, owing chiefly to infantile mortality, the death rate is a high one.

The distribution of the population according to Wards is shewn in the subjoined table. The 1896 estimate is only approximate and based principally on the increase in the number of dwelling-houses in each locality.

Wards.	Population in 1891. (Census).	Population in 1896. (Estimate).
East	12113	15403
Central	10501	11208
West	5736	7172
St. Mary's	6619	9717
Total	34969	43500

The increase for 1895-6 has been principally in the East and St. Mary's Wards and to a less extent in the West as is shewn by the table below shewing the number of new houses in the respective Wards.

HOUSING OF THE POPULATION.

The following table shews the number of dwelling-houses in Eastbourne and in each Ward at the Census of 1891, and as estimated in 1895. The figures in the second column are only approximate but may be taken as fairly correct.

Wards.	Houses in- habited at Census, 1891.	Houses built since Census to end 1896.	Persons per house 1891 Census.	Houses certified in 1895.*
East	1927	352	6.2	95
Central	1528	69	6.8	5
West	716	119	8.0	18
St. Mary's	1019	316	6.5	72
Totals	5190	856	6.7	190
			-	

The average number of persons per house is small when the number of Hotels, Schools and very large houses is taken into consideration. Had the Census been taken later in the year than April, a larger number per house would have been found.

Particulars as to the housing of the population were given in detail in the Annual Report for 1893, extracted and calculated from the Census returns. Of sixteen places similar in character to Eastbourne, twelve had a smaller percentage of crowding of population. The percentage of people overcrowded in Eastbourne was 3.73 as against 11.23 in England and Wales. The mere number of persons per house is no criterion as to the amount of, or existence of, overcrowding, this is clearly shewn when it is understood that according to parishes the largest number of persons per house at the 1891 Census was, in St. John's parish,

^{*} From figures kindly supplied by Mr. FIELD, Architect and Building Surveyor.

viz., 8.5; and the smallest number in Norway, viz., 5.4 per house, St. John's being one of the healthiest and wealthiest parishes and least crowded whereas Norway is the reverse.

The population density in the Borough as a whole in 1896 was 8.0 per acre; in the part of the Borough built over, it was approximately 43 persons per acre.



MARRIAGES.

The number of marriages recorded in the Borough during 1896 was 267, equal to a marriage rate of 6:13 per 1,000 persons living. The number in 1894 was 256 and the rate 6:24 per 1,000 persons, in 1895, 238 and 5:66.

The marriages recorded in Eastbourne have in recent years averaged 254.

The average annual marriage rate throughout England and Wales for the decennial period 1883-1892 was 14.9.

BIRTHS.

The births registered during 1896 numbered 919, and comprised those of 444 males and 475 females.

There were 227, 236, 244, and 212 births in the four quarters of the year in order respectively.

The birth-rate for the year was 21.12 per 1,000 per annum. This is the lowest birth-rate on record in recent years and corresponds with the very low rate for England and Wales.

The births in Eastbourne and the birth-rates for Eastbourne and for England and Wales for the past ten years are as follows:

Years.	Number of Births.	Eastbourné, Birth-rate per 1,000 living.	England & Wales Birth-rate per 1,000 living.
1886	889	32.01	32.8
1887	848	29.09	31.9
1888	780	25.49	31.3
1889	790	24.59	31.1
1890	735	21.79	30.5
1891	857	23.18	31.4
1892	921	24.77	30.2
1893	897	22.99	30.8
1894	975	23.8	29.6
1895	917	21.8	30.3
1896	919	21.13	29.7

Of the total number of births registered, 34 were illegitimate, being in the proportion of 37 to 1,000 births as against 48 last year.

The average proportion of illegitimate to legitimate births in recent years throughout England and Wales, up to 1892, was about 47 to each 1,000 births.



VACCINATION.

The vaccination returns for recent years for Eastbourne (excluding Norway) are as follows :—

* Vaccination Returns for Eastbourne.

Year.	Births Registered.	Successfully Vaccinated.	Percentage of Chil- dren born, Vaccinated.
1883	890 -	699	78.54
1884	935	692	74.01
1885	1002	650	64.37
1886	984	631	64.13
1887	902	477	52.88
1888	864	371	42.94
1889	879	270	30.71
1890	828	166	20.04
1891	934	194	20.77
1892	969	224	23.11
1893	897	132	14.71
1894	975	107	10.97
1895	917	183	19.95
1896	919	206	22.4

^{*} From Figures kindly supplied by Mr. J. Nicholls, Vaccination Officer.

Since 1894, when Vaccination was at its lowest in Eastbourne, there has been a rise in the percentage of infants vaccinated. There has also been during 1896 more general vaccination of previously unvaccinated people, no doubt due to nervousness, owing to the prevalence of small-pox at Gloucester and elsewhere. The percentage number of children vaccinated in a so-called anti-vaccination district, such as Eastbourne, will always vary with

the proximity or otherwise of small-pox. Gloucester, for instance, was formerly a district noted for its proportion of unvaccinated children; it has lost that notoriety now.

After seven years the Royal Vaccination Commission in 1896 issued its report, which has not advanced the settlement of the question very much. The Commission arrived at the foregone conclusion that the case for vaccination was thoroughly proved, and yet it ends by recommending relaxation of the law relating to infantile vaccination as well summarised in an article in the Lancet of October 3rd.* The Commissioners would have the legislature place two courses before the indifferent, which class forms the bulk of the persons who do not have their children vaccinated, on the one hand that they should allow visiting medical men to vaccinate and revisit the child at its own home at the cost of the State and with certain specified precautions; and on the other hand that they should go to a magistrate and make a declaration of conscientious objections to vaccination. dissentient memorandum was framed by two members of the Commission, but even they nowhere expressed a disbelief in vaccination as a power against small-pox; they even suggest that moral influence may properly be used in pressing it upon the population. This admission by the strong opponents of compulsory vaccination on the Commission deals admirably with the question of the supposed risks involved in the operation.



^{*} Lancet, 1896, Vol. ii, p.p. 1241, 1250.

INFECTIOUS DISEASES.

Notification of infectious disease has been in force in Eastbourne since 1890 and the number of notifications received during 1896 exceeded those received in 1892, 1894 or 1895. A small table shewing the total number of cases notified and the sickness rate of each year is appended.

Year.	Total number of cases notified.	Sickness-rate per 1000 of population	
1890	. 569	16.23	
1891	243	6.94	
1892	179	4.81	
1893	335	8.58	
1894	143	3.48	
1895	156	3.71	
1896	223	5.13	

A complete table giving details of the various diseases notified from January, 1892, to January, 1897, and divided according to the years and the quarters of each year, is given in the appendix.

The increase in 1896 was due to an excess of Enteric Fever cases in the Autumn, localised and due as explained later on, to a foreseen and entirely preventible cause.

The cases of Scarlet Fever and Diphtheria which occurred were sporadic only. An outbreak of Puerperal Fever of 5 cases was promptly checked. Measles of a mild type was very prevalent during a portion of the year leading to closure of All Souls' Infants School from May 13th for three weeks, of St. Mary's Infants School from July 19th for one week, and of Meads Road Infant School from April 14th to April 20th. No schools were closed by the Sanitary Authority except the first of these three for any disease.

The distribution of the notified cases according to the Wards, with the sickness rate for each Ward, was as shewn in the following table. The sickness rate is in advance of that of 1895 in each Ward.

D'		The				
Disease.	East. Central.		West.	St. Mary's.	Borough.	
Diphtheria	19	4	11	8	42	
Scarlet Fever	27	20	7	20	74	
Enteric ,,	14	5	2	63	84	
Puerperal,	5	-	-	1	6	
Erysipelas	8	4	I	4	17	
Total	73	33	21	96	223	
Sickness-rate	4.7	2.9	2.9	9.8	5.12	

Again the Central and West Wards have equally the smallest sickness rates. The excessive rate in St. Mary's Ward was due to special causes referred to later on under the heading Enteric Fever. For years past, however, St. Mary's Ward has had the largest sickness rate even apart from special causes. The presence of the Infectious Diseases Hospital in the Ward is not a cause of this unenviable distinction. No case of infectious disease outside in St. Mary's Ward has been trace I to that institution. The comparative age and want of modern conveniences of many of the dwellings in a portion of the Ward, the reluctance of the inhabitants of that same portion to give up their old wells and other sources of water supply, and the fact that residents in the Old Town do not take so kindly to new methods of sanitation as those in the other districts, are among the many causes affecting the number of notifications from that Ward. In future one Inspector of Nuisances will act solely for that Ward instead of jointly with the West Ward.

The incidence of infectious disease on the different sexes and on different age groups of the population is given in the subjoined tables.

As is usual there was an excess of females in the Diphtheria class.

Notifications, 1896.

AGE INCIDENCE.

Disease.	0—1	1—5	5—15	15—25	25—65	65 and upwards
Scarlet Fever	I	13	41	14	5	_
Diphtheria	-	11	24	4	3	-
Enteric Fever	-	4	23	16	31	1
Erysipelas	-	I	I	5	9	I
Puerperal Fever	-	-	-	-	6	-
						-
Totals	I	29	99	39	54	I

SEX INCIDENCE.

Disease.	Males.	Females	Totals.	
Scarlet Fever	32	42	74	
Diphtheria	17	25	42	
Enteric Fever	51	33	84	
Erysipelas	12	5	17	
Puerperal Fever	-	6	6	
Totals	112	III	223	

In the course of attempts to ascertain the source of each case of infectious illness it was found that of the 213 cases 26 were

probable importations (that is, the patients were visitors and brought the disease with them) or were caused by imported cases.

Of these 26 cases 13 were Scarlet Fever, 6 Diphtheria, and 7 Enteric Fever cases. It is very possible that others also were due to convalescent visitors.

HOUSE DISTRIBUTION.

The 223 notified cases of illness occurred in 168 different houses, being an average of 1.3 cases per house.

In 137 houses one case occurred	in each	 137
In 18 houses two cases	,,	 36
In 7 houses three cases	,,	 21
In 3 houses four cases	,,	 12
In 1 house five cases occurred		 5
In 2 houses six cases occurred in	each	 12
		223

The following table shews the number of houses affected by cases of notifiable disease, and to some extent their sanitary condition roughly classified:—

Houses affected by	Good.	Fair.	In- different.	Bad.	Not reported.	Total.
Enteric Fever	13	29	I	17	2	62
Scarlet Fever	20	18	4	4	3	49
Diphtheria	15	13	3	5	I	37
Puerperal Fever	2	3	-	I	-	6
Erysipelas	5	10	-	I	I	17
Totals	55	73	8	28	7	171

The total comes to 171 instead of 168 as before mentioned, because in three houses instances of two diseases occurred, viz: In the Princess Alice Hospital, one case of Scarlet Fever and two

of Enteric Fever; at 3, Marine Road, one of Scarlet Fever and one of Puerperal Fever; and at 15, Baker's Road, one each of Scarlet Fever and Diphtheria.

In the case of houses whose sanitary condition was bad, and which required attention, steps were taken to procure amendment.

No milk supply or laundry was responsible for any outbreak during 1896. Besides the imported cases the remainder were mainly sporadic and possible cases were generally discovered. Elementary schools were doubtless the means of spreading Measles, and a few cases of Diphtheria at the end of December had probably some connection with one of the elementary schools.

REMOVALS TO THE SANATORIUM.

A striking feature of the year's working is that every case of Scarlet Fever that occurred, without exception, was removed to the Borough Hospital. The inhabitants are shewing a growing intelligent appreciation of the benefit of having such cases removed to the Hospital. It is a great advantage to have no centres of infection left in the Borough and visitors appreciate the advantage.

The Sanatorium and Langney Hospital provide accommodation for cases of Scarlet Fever, Diphtheria and Enteric Fever and for cases of Small-pox respectively. Of the cases of these diseases notified a percentage of 70 was removed. More would have been removed had there been accommodation during a slight epidemic. On November 24th a new block of 17 beds was opened at the Sanatorium. At the lowest computation there are now beds for 37 patients and as so many are children there is really space for more. There are in addition 18 beds at Langney Hospital.

Owing to the provision of a fourth block at the Sanatorium, doubtful cases can now be admitted for observation.

The percentage of cases of Scarlet Fever, Enteric Fever, and Diphtheria removed to the Sanatorium during the five past years has been in each year as follows:—

In 1892, 56.9 per cent. of the cases.

			1	
In	1893,	64.5	"	,,
In	1894,	72.9	,,	,,
In	1895,	72.5	,,	,,
In	1896,	70.0	,,	,,

The percentage of cases removed in 1895 and 1896 of each disease were as follows:—

Disease.	Number of cases notified,		Number removed.		Percentage of Removals.	
	1896	1895	1896	1895	1896	1895
Scarlet Fever	74	59	74	56	100.0	94.9
Diphtheria	42	36	18	18	42.8	50.0
Enteric Fever	84	18	48	8	57.1	44.4

The one case of small pox that was imported was at once isolated at Languey Hospital.

In the above three diseases, the fatality of the cases which were removed to the Sanatorium was 4.6 per cent.; of the remaining cases, *i.e.*, those not removed to the Sanatorium, the fatality was 15.0 per cent.

In 1895 the fatality for these diseases was 4.7 per cent. in the Sanatorium cases, and 17.2 per cent. in the remaining cases. The difference is due very much to the nursing, food, and care received at the Borough Hospital by the poor, who cannot obtain the same at home. The medical treatment is the same in or out, as patients at the Hospital are at liberty to have their own medical attendants if they wish.

The advance of education and the improvement in Isolation Hospitals combine to cause the old prejudices against sending friends and relatives to such institutions to be gradually disappearing.

SMALL POX.

No notification of this disease was received during 1896, because the one case that was found in Eastbourne occurred in a Government establishment. The patient was a Militiaman from West Sussex who had only been in the Borough about two days when the disease developed, so that he had evidently "caught" the malady elsewhere. The Military Authorities handed the patient and the management of the affair over to the Sanitary Authority, and gave every assistance. The measures taken for the prevention of spread were those taken in any other such serious case. They were:—

- · 1. Immediate removal and isolation of the patient.
 - 2. Vaccination, Daily Medical Inspection, and Quarantine of those who had been in the same barrack-room or otherwise in contact with the patient.
 - 3. Disinfection (or destruction if necessary) of rooms, bedding, clothing, &c.

In a non-vaccination district such as Eastbourne measures have to be relied on for the prevention of the spread of small-pox other than vaccination, though this help is in most cases accepted readily enough when the disease actually is near. Sub-joined is a list of the measures advised by the dissentient members of the Royal Commission on vaccination. It is interesting to note that their anti-compulsion ideas do not extend very far. If these measures were combined with systematic vaccination, small-pox could be efficiently kept under.

- Prompt notification of any illness suspected to be smallpox. Improved instruction in the diagnosis of smallpox.
- A Hospital suitably isolated of adequate accommodation in permanent readiness and capable of extension if required. No other disease to be treated at the same time in the same place.

- 3. A vigilant sanitary staff ready to deal promptly with first cases and if necessary to make a house-to-house inspection. The Medical Officer of Health to receive such remuneration as to render him independent of private practice.
- 4. Prompt removal to hospital by special ambulance of all cases which cannot be properly isolated at home. Telephonic communication between health office and hospital.
- 5. Destruction of infected clothing and bedding, and thorough disinfection of room or house immediately after removal of the patient.
- 6. Daily observation (including where possible, taking the temperature and inspection for rash) of all persons who have been in close contact with the patient during his illness; such supervision to be carried out either in quarantine stations (away from the hospital) or at their own homes.
- 7. Closure of schools on the occasion of the occurrence of small-pox among the scholars or teachers.
- 8. Hospitals and quarantine stations to be comfortable and attractive and so administered as to secure the confidence of the public. Hospital treatment to be free to all classes and compensation to be paid to those detained or otherwise inconvenienced in the public interest at the public expense.
- 9. Tramps entering casual wards to be medically inspected, their clothing to be disinfected, and bath provided. The measures for detection and isolation of small-pox in common lodging houses suggested in Section 507 of the Report to be carried out.
- 10. International notification of the presence of small-pox and special vigilance at seaports in communication with infected places, after the plan adopted in the case of cholera.

11. Attention to general sanitation, prevention of overcrowding, abundant water supply, and frequent removal of refuse.

DIPHTHERIA.

Forty-two notifications of cases of this disease were received in 1896 as compared with 36, 40, 58, 59, 184, and 495 in the five preceding years respectively, from 1895 to 1890 inclusive. The distribution of the 42 cases according to Wards has been shewn in a preceding table.

These notifications included some cases of severe Sore-throat, which were probably Diphtheria, but possibly not.

The fatality was 6 out of 42 cases notified, as against 5 out of 36 in 1894.

The numbers shew a slight interference in 1896 with the steady diminution in number of cases of Diphtheria year by year in Eastbourne. Diphtheria is on the increase in the country generally, and no doubt the aggregation of children in schools is a factor in the spread of the malady. As before mentioned some of the cases were imported, and the remainder were sporadic, except a few cases which occurred together towards the end of the year in children attending Meads elementary school.

SCARLET FEVER.

The total number of cases of this disease in 1895 was 74, as against 59, 67, 218, and 57 in 1895, 1894, 1893, and 1892 respectively.

The fatality was one case in the 74. As all the cases notified were removed to the Sanatorium it would at first sight seem difficult to explain the increase in the number of cases notified in 1896. In three separate sets of cases, however, the original case was mild and not noticed until others developed the disease, and the best arrangements as to isolation cannot get over this difficulty.

ENTERIC FEVER.

Up to 1896 the yearly average of cases of this disease notified in Eastbourne was 15.5 and, many of these being imported cases, Eastbourne could be properly considered very free from Enteric (Typhoid) Fever. In 1896, however, 84 cases were notified and the cause of this increase in the number of cases of such a preventible disease received careful investigation.

The cases may be classified as follows :-

- 1. Sporadic cases such as one obtains in other years, causes difficult to ascertain. These numbered 19.
- 2. Imported cases, *i.e.*, cases having no connection with Eastbourne as a cause. Number, 7.
- 3. Cases probably due to ingestion of oysters specifically tainted. Number, 6.
- 4. Bourne Stream cases. Number, 52.
 - (a) Due directly to taking the water. Number, 45.
 - (b) Due indirectly from Bourne Stream cases. Number, 7.

The Sporadic cases are larger in number than usual in Eastbourne but the excess is explicable. In one family five inmates were affected with an exceptionally virulent form of the disease, fatal in three of the five cases. Two at least of the nineteen patients, comprising the Sparodic cases, had been drinking foul water on allotment grounds. One other was a Nurse who took the disease by direct infection from her patients.

Of the nineteen Sporadic cases seven were fatal. Of the seven imported cases from London, Kent, Hants, Willingdon and elsewhere, none were fatal. Such cases are usual in health resorts as Enteric Fever often commences in an obscure way, and such patients go to health resorts for change, etc., without knowing what is wrong with themselves.

Of the six probable "oyster" cases one was fatal. The evidence against the oysters, though circumstantial, was strong. The oysters were obtained from one merchant and from one

place. The patients were all adult men. The oyster vendor gave all information possible by which the oysters were traced via Liverpool to a tidal estuary below a very large town famous for Typhoid Fever. Other Medical Officers had traced cases similarly to the same district.

It should be added that the oyster merchant was willing to meet every suggestion and agreed to change his source of supply.

The possibility of spread of Enteric Fever by ingestion of oysters is beyond doubt. To spread infection it is certain that the oyster must have taken up the specific poison. The proper mode of prevention of spread of disease through such a cause is to have effective supervision of oyster beds by an independent official who shall condemn beds laid down in localities where the oysters are liable to be sewage fed.

Fifty certainly, and probably fifty-two of the 84 cases of Enteric Fever notified in Eastbourne during 1896 were due to the pollution of the Bourne Stream, and the using of the water from that stream for drinking purposes. Of the 52, 45 cases occurred from the direct using of the water, and seven cases occurred from infection from some of these 45 previous cases. The 45 direct cases were notified between Sept. 17th and Oct. 27th inclusive; the seven indirect cases between Oct. 28th and Dec. 11th.

In addition to the 52 cases above mentioned, at least 7 cases of Enteric Fever occurred out of Eastbourne in persons who had been in Eastbourne within the previous week or two, and who had drank the water from the Bourne Stream.

Of the total 59 cases 2 only died, 1 in Eastbourne and 1 in London, this latter being one of the seven just mentioned who had just previously left the town.

The history of the epidemic is as follows:—Towards the end of the summer, it became evident that a large number of persons were drinking the water from the Bourne Stream in the Old Town, in preference to the saline water from the Company's mains. This led to a careful inspection by the Medical Officer of

Health of the stream and its sources, from which it was obvious that the stream could be and was polluted both at its sources of origin and along its course. The subjoined events followed:—

August 10th. Report of the Medical Officer of Health to the Sanitary Committee as to the impurity of the Bourne Stream and the increasing use of that water by the inhabitants near the stream. Suggestion by Medical Officer of Health that warning notices be issued. Resolved by Committee that the Medical Officer of Health interview Mr. Whitley and request him to have the means of access to the stream closed. Mr. Whitley making no claim of right and the Medical Officer of Health considering the matter urgent;

August 14th.—Grating over dipping hole of Bourne Stream in Ocklynge Road bolted down by order of the Medical Officer of Health.—Grating torn open by the inhabitants.

August 15th.—Grating securely fastened down again by order of the Medical Officer of Health.—This action was made of none effect as a private owner opened his grounds to the public so that access to the stream was again obtained.

August 20th. Public Meeting condemning the Medical Officer of Health and the Sanitary Committee for closing the stream, and eulogising the private owner above alluded to for his kindness in opening his grounds and so nullifying the action of the Medical Officer of Health.

—At this meeting a letter was read from the Medical Officer of Health stating that sooner or later illness must arise from drinking such water.

August 21st. The letter just referred to appeared in the Public Press.

August 24th. Deputation from Old Town to the Sanitary Committee protesting against the closure of the stream by the Medical Officer of Health.—General inspection by the Deputation and Sanitary Committee of the stream and its pollutions, when the Committee approved of the action of the Medical Officer of Health.

In September the grating was again torn open by the inhabitants, though as the stream had been accessible through private grounds this did not make any difference. Medical Officer of Health and Inspector were constantly warning persons using the water.

When reports of analyses were shewn proving the organic contamination of the water the officials were freely accused of "manufacturing" the samples.

Notices of the danger, drawn up by the Medical Officer of Health, were posted at the dipping well and elsewhere nightly and were destroyed or defaced daily by the inhabitants. Inspector Grant also left notices at the houses warning the people against the stream.

The notices being disregarded and destroyed, the gratings being again torn open and some of the inhabitants refusing to part with their faith in the special virtues of the water of the stream, a Magistrates' Order was obtained on September 25th for the closing of the public means of access to the stream, and a salutary hint was given at the same time to private owners who might open their grounds to the public and so defeat the object of the order.

In brief, the warning and closing began on Aug. 10th and 14th, the public meeting condemning the Authority for closing was held on August 20th; the Medical Officer of Health's warning letter was read then and published next day in the local press and the cases began to be notified on Sept. 17th.

Two charges are still made against the Authority in the matter.

(1) That the Bourne Stream was not the cause of the outbreak. Unfortunately for this charge there is not the

remotest cause for doubt as to the Bourne Stream being the cause as the following will shew:—

- (a) The Borough of over 5,000 acres was free from Enteric Fever except over a small area in St. Mary's Ward in the neighbourhood of the stream where the cases occurred.
- (b) All the persons affected had used the water in question within the incubation period.
- (c) There was nothing else in common to all the cases; milk supply, schools, occupation, condition of life, &c., being different in the various cases.
- (d) The Bourne Stream was polluted by sewage matter at the time it was being drank as was evidenced by the Analyst's reports.
- (2) The other charge is that the Authority did not act soon enough. The Medical Officer of Health issued warnings on August 10th, closed the dipping hole on August 14th and 15th, warned the Public Meeting by letter on August 20th and in the press August 21st, and the first case was notified September 17th. This is the answer to that charge.

It is however true that the natural impulse of the Authority to try to act by persuasion in the matter and to refrain from using magisterial force until the last instance was a mistake. The stream should have been closed by Magistrates' order at once on August 14th, instead of milder measures being tried which were thrown away. Bitter opposition was encountered as it was, and whether a Magistrates' Order and the hint as to private owners would have been obtained on August 14th is a question.

After the outbreak a gentleman in the Old Town remembered there had been a previous trouble in connection with the Bourne Stream. Enquiries were made by the Medical Officer of Health who found that in 1870 a similar outbreak occurred and a Local Government Board Inspector was sent down from London to inspect and report. In Old Town there were 70 cases and 7 deaths.

Extracts from the Inspector's reports are subjoined. By "Motcombe Stream" the Bourne Stream is meant. (According to the "old inhabitants" at the Public Meeting on August 20th the water had been drank for generations without any harm resulting).

"The majority of the inhabitants procure their supply from a stream known as the Motcombe Stream. This takes its origin from two places the first being a dirty reservoir which I am informed has not been cleaned out for ten years. This reservoir lies close to and at a lower level than a farmyard and it is evident that the water supplying it must pass beneath this yard and carry at least some of the drainage with it.

"A pump known as the Motcombe pump is placed close by on the road-side in order to supply the public with this water; a sample drawn from it was found to be full of floating matter evidently organic.

"The second origin of the Motcombe Stream is a spring arising partly from the soil beneath the churchyard and to a less extent from land on which formerly stood privies and cesspools.

"The Motcombe Stream thus constituted flows through Bay Pond a series of dipping holes being made along its course for the use of the inhabitants. The water from the pump and from the dipping holes has been analysed and condemned (the water being organically contaminated)."

After this second severe lesson as to the danger of drinking water from the Bourne Stream, it is to be hoped that even the "oldest inhabitants" will abstain from advising others to test the supposed virtues of the water of this stream except as a lotion. In the case of a stream open in its course for such a distance it is practically impossible to close all the means of access, but as far as "dipping holes," &c., are concerned this has been done.

The sanitary condition of the houses in which Enteric Fever occurred has been given in a preceding table. An insanitary house, without the presence of the specific germ, cannot be a direct cause of the fever but can be and frequently is a

contributory cause. The specific poison being in the dejecta mainly, if not entirely, it is obviously of great importance to thoroughly disinfect and destroy the same. Hence at the Sanatorium the refuse cremator is used for the purpose, in private houses disinfectants have to be used. The method of collecting infectious matter in such cases from houses to be taken to the cremator for destruction is sometimes used. Given a perfect staff, perfect system, perfect intelligence and perfect apparatus the ideal method of dealing with the infective matter would be to collect it and destroy it in a cremator at one centre. It becomes a matter of much consideration whether the system should be adopted in any particular district. In Eastbourne in 1896 the other method was considered preferable, viz., of removing every case possible to the Sanatorium and of destroying infectious matter in the other cases as far as possible at the patients homes.

ERYSIPELAS.

Seventeen cases were notified. The sanitary condition of a house may have a contributory causal connection with the onset of Erysipelas and hence notification of a case leads to house inspection. This seems to be the principal use of the inclusion of this disease in the notifiable list.

PUERPERAL FEVER.

Six cases were notified, five being in the East Ward and one in St. Mary's. One was removed to the Sanatorium. Four of the eastern cases were in a series and one was fatal. A nurse was summoned in connection with these cases for disregard of precautions and warned by the Bench. The medical man concerned at once discontinued his labour practice for a time.

MEMBRANOUS CROUP.

No separate notifications of this disease were received. The disease being practically identical with Diphtheria, the notifications were made under that heading.

The non-notifiable diseases Measles, Whooping Cough, &c., except when fatal, are only known of by the Authority incidentally. Measles was epidemic in a mild form during 1896. These diseases are farther referred to under the heading of "Deaths."



DISINFECTION.

As regards the rooms and houses infected, in practically every case disinfection has been carried out by the Sanitary Inspectors and Assistants. It should never be done by anyone else, for though the directions of the medical attendant are often all right, the method of carrying out those directions is by no means necessarily so, even if they are carried out at all. The disinfection by the Inspectors has been thorough, especially where the patients have been removed to the Sanatorium. If not so removed it is not possible to make sure that in convalescence the patients have not gone beyond the bounds of isolation and have not carried infected matter beyond the sick rooms. In the best managed household it is a practical impossibility to thoroughly and entirely isolate a case of Scarlet Fever, for instance, for six weeks.

Disinfection of rooms, &c., has been carried out by re-papering, limewashing, painting, and thorough washing with disinfectants. No reliance is placed on sulphur fumigation. Perchloride of mercury spray has been used to a large extent by means of Defries' patent Equifex sprayer which was purchased during the year.

Articles that could stand it have been disinfected in the steam disinfector, others have been sponged, rubbed or washed with disinfectants, and where necessary, burnt.

The sending of clothing, &c., to the Sanatorium for disinfection in the steam apparatus after any infectious disease, however slight, has been encouraged.

Disinfecting work done at the steam disinfecting station:—
195 loads of bedding, &c.

3 boxes and 6 parcels of wearing apparel.

172 sets of patients clothes.

The isolation cottage for temporary accommodation during disinfection of houses has been extremely useful. Thirty persons availed themselves of its use during the year, and fifty-four in the first year of its existence.

DEATHS.

The deaths recorded during 1896 were 454 in number, as compared with 521 in 1895 and 430 in 1894, and were distributed amongst the various classes of disease as follows. Deaths during 1894 and 1895 are similarly classified for comparison.

Class	Class. Disease.		Percentage of Total Deaths.				
Class.	Discuso.	1896	1896	1894	1895		
Class I	Zymotic Diseases	68	15.0	7.67	19.4 *		
" II	Parasitic Diseases	0	0.0	0.00	0.0		
" III	Dietic Diseases	I	0.5	0.47	0.3		
" IV	Constitutional Diseases	117	25.8	26.28	24.4		
" V	Developmental Diseases	39	8.6	14.65	12.6		
" VI	Local Diseases	193	42.2	45-35	38.8		
" VII	Deaths from violence	16	3.2	2.26	2.1		
" VIII	Deaths from ill-defined and not specified causes		4.4	3.03	2.2		
Total	de offe desir aless si	454	100.0	100.00	100.0		

^{*} Prevalence early in 1895 of Influenza.

The total death-rate for the Borough for 1896 inclusive of every death that took place was 10'43 per 1000 per annum. Excluding the deaths of non-residents of Eastbourne, which numbered 58, the rate was 9'10 per 1000 per annum.

This is the lowest rate on record in Eastbourne and is probably unequalled by that of any town of similar size in the country. The rate for 1894 was just a fraction higher.

A table is appended of the death-rates of recent years in Eastbourne; those for England and Wales generally are added as a matter of interest, though they cannot strictly be compared

with the Eastbourne rates, other things, such as age and sex constitution, &c., not being equal.

Years.	Number of Deaths.	Death-rate.	Death-rate, ex- cluding deaths of visitors.	Death-rate of England and Wales.
1886	443	15.95	14.66	19.2
1887	355	12.18	11'45	19.1
1888	421	13.75	12.90	18.1
1889	416	12'95	10.92	18.2
1890	485	14.38	12.92	19'5
1891	468	13.21	12.21	20'2
1892	505	13.28	11.67	19.0
1893	576	14.76	12.79	19.2
1894	430	10.49	9.59	16.6
1895	521	12.40	10.41	18.7
10 years average.	462	13.36	12.01	18.2
1896	454	10.43	9.10	17.1

1t will be noted from this table that the death-rate for England and Wales for 1896 was the lowest on record with the exception of that for 1894.

Among the causes for the exceptionally low rate in Eastbourne must be noted :—

- 1. The sex distribution of the population. The large excess of females especially at ages where low death-rates prevail favours a low rate.
- 2. The climatic conditions of Eastbourne which are very satisfactory. Neither of these conditions which assist a low rate can explain the yearly diminution of the rate, the excess of females and the climatic conditions existed when the death-rate was persistently about 14 and 15 per 1000 per annum instead of between 10 and 12.

- 3. The small number of persons per acre and the amount of open space in Eastbourne.
- 4. The sanitary condition of the Borough and the attention given to sanitation. While other items have remained the same, or nearly so, the work of the Sanitary Department has improved year by year, and the low death-rate may fairly be claimed as a reward for such policy by the Sanitary Authority.

The persistent improvement of house property, the steady refusal to countenance nuisances, including overcrowding, the strict action with regard to adulteration of food, sale of unsound food or use of impure water, must have and has had a most useful effect in improving health and saving life.

It cannot be too well understood that a difference of one per thousand per annum in the death-rate of Eastbourne means at least 43 lives lost or saved. The death-rate for 1896 is more than 3 per 1000 less than even the low average of recent years, that is therefore a saving of 129 lives in the year.

The deaths during 1896, excluding deaths in institutions, were distributed over the various Wards of the Borough as follows:—

		Number of Deaths	Annual Death-rates per 1,000.					
		1896.	1896	1895	1894	1893	1892	
East		195	12.6	12.24	10.6	17.01	13.35	
Central		73	6.2	11.26	10.3	9.54	11.38	
West		32	4.4	6.03	4.2	15.82*	*****	
St. Mary's		92	9.4	9.95	6.9	15.82	10.35	
Institutions		62						

^{*} The 1893 Rate is uncorrected by exclusion of Deaths in Institutions.

To make the rates correct the deaths in Institutions should have been properly distributed over the various Wards but this could not be done. Many of the deaths in Institutions were those of visitors, otherwise the majority were of people from the East Ward and very few indeed from the West Ward.

Sixty-two deaths occurred in Institutions as follows :-

Institutions.	Ward.	Number of Deaths.	
Workhouse	St. Mary's		30
Princess Alice Hospital	St. Mary's		21
Borough Sanatorium	St. Mary's		7
All Saints' Hospital	West		4

The causes of death in comparative excess in the East Ward were, Diarrhœa, Phthisis, Premature Birth, Bronchitis, Pneumonia, Convulsions and General Debility all associated more or less with the conditions of life under which the poorer section of the community live.

The 454 deaths include those of 233 males and 221 females. The death-rate of males for 1896 was 13.1, that of females 8.5, the death-rate of females being, as usual, less than that of males. Males especially exceeded females in deaths from Phthisical Diseases, Bronchitis, Pneumonia, Inanition, Measles and Enteric Fever. The excess of female mortality was more especially from Cancer, Old Age, Apoplexy, and Diseases of the Stomach.

Ages at Death.

The death-rates at different ages and of different sexes are more important for instituting comparisons than the total death rate, since in them there are no sex and age fallacies. Hence the following table is subjoined.

	Males			Both Sexes			
Ages.	No. living.	Deaths,	Death-rate per 1000 living at each age group.	No. living.	Deaths.	Death-rate per 1000 living at each age group.	Death-rate per 1000 living at each age group.
Under 1	417	58	139-0	492	47	95.5	115.5
1-5	1639	30	18.2	1813	16	8.8	13.0
Total under 5	2056	88	42.8	2305	63	27.3	34.6
5—15	4517	12	2.6	4702	10	2.1	2.3
15—25	3421	13	3.8	6542	18	2.7	3.1
25-65	6974	70	10.0	11138	78	7.0	8.1
65 and over	730	50	68.5	1115	52	46.6	55.2

Infantile Mortality.

The total number of deaths of infants, that is of children of ages under one year, was 105, males 58, females 47. Infantile mortality is calculated on the number of births registered, and for 1896 at the rate of 114 per 1000 births.

This is a low rate of infant mortality, but the conditions in Eastbourne are such that the rate should always be below an average rate. The average rate for England and Wales in the past ten years has been 148 per 1000 births.

Year.	Deaths under I year.	Mortality per 1000 births
1896	105	115
1895	122	133
1894	95	97
1893	130	144
Average of ten years up to 1893	106.6	125

The infantile mortality for England and Wales for 1896 was 148 to every 1000 registered births.

The subjoined tables show the principal causes of the deaths of infants in recent years.

Deaths,	1892	1893	1894	1895	1896
From Zymotic diseases	 35	56	9	38	26
Constitutional diseases	 15	9	14	13	9
Developmental diseases	 36	19	22	26	23
Local diseases	 53	27	38	34	24
Deaths from violence	 5	1	-	2	7
Deaths from ill-defined and specified causes	9	18	12	9	16

Death of Infants (under I year.)

Disease.		1892	1893	1894	1895	1896
Measles	 	 1	10	-	2	6
Whooping Cough	 ***	 3	13	1	5	-
Diarrhœa	 	 30	30	7	30	20
Other Zymotic diseases	 	 1	3	1	1	-

The number of deaths from infantile diarrhœa bears a close relation to the temperature of the air in summer.

Two of the 20 infants who died from diarrhea were illegitimate, eight at least were insured, and 16 out of 17 where particulars ascertained were bottle fed or fed with patent foods. In four of the cases the mother had to go to work. Illegitimacy, insurance, bottle feeding, biscuit and similar feeding, the going to work of the mother and the sanitary condition of the home are important factors in illness and deaths from infantile diarrhea

The Society for the Prevention of Cruelty to Children is a factor in the diminution of illness and death of children.

In the absence of information as to the distribution of the births according to the Wards I am unable to give a true comparative mortality, but the deaths of infants occurred in the respective Wards as follows:—

Ward.	Estimated Population, 1895.	Infant Deaths.
East	 15403	60
Central	 11208	13
West	 7172	5
St. Mary's	 9717	27
	43500	105

Senile Mortality.

Of the 454 deaths which occurred in 1896 there were 102 of persons over 65 years of age.

Between 65 and 75 years of age	57	Males	28	Females	29
Between 75 and 85 years of age	34	"	18	,,	16
Over 85 years of age	II		4	,,	7

Seasonal Mortality.

The deaths during 1896 occurred in months as follows :-

		January	32
First Quarter	120 -	January February March	49
		March	39
	(April May June	39
Second Quarter	100 <	May	23
			28
	(July August September	40
Third Quarter	122	August	46
		September	36
		October	34
Fourth Quarter	112	November	39
		December	39

The following is an interesting table of comparisons shewing quarterly death-rates :—

Distri	cts.	Ist Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Year.
Eastbourne		11.03	9.19	11.51	10.29	10.43
England &	Town Districts }	18.2	17.2	17.6	18.6	18.0
England & Wales	Country Districts }	16.6	14.2	13.7	16.3	15.3



ZYMOTIC DISEASES.

This class of disease is of essential importance to Sanitary Authorities since it includes so many "preventible" diseases. It includes the "seven principal zymotic diseases," i.e., Small Pox, Measles, Whooping Cough, Scarlet Fever, Diphtheria, Fever, and Diarrhœa, and all Miasmatic, Diarrhœal, Septic, Venereal or Zoogenous Diseases.

The fact is apt to be overlooked that the so called more serious diseases such as Small Pox, Typhoid Fever, &c., are of very much less consequence in England and Wales than such diseases as Measles, Diarrhœa, &c. Thus in 1896 in England and Wales the deaths registered were as follows:—Measles, 17,169; Diarrhœa, 17,114; Whooping Cough, 12,736; Diphtheria, 8,805; Scarlet Fever, 5,431; Fever (including Typhoid), 5,147; Small Pox, 534. The same order of importance practically obtains in Eastbourne, and the more people realise that Measles, Diarrhœa, &c., are not trivial complaints the better for the safety of children at large.

In 1896 in Eastbourne, from zymotic diseases, there were 68 deaths. From the "seven principal zymotic diseases" there were 62 deaths, inclusive of 25 from Diarrhœa. These are set out at length in the appendix, and are classified and compared with deaths from the same diseases in other years in the Borough.

The Zymotic death-rate for 1896, i.e., the death-rate from the seven principal Zymotic diseases, was 1.42 per 1000 (England and Wales for 1896 2.18 per 1000), the total Zymotic rate being 1.56 per 1000 per annum.

The highest recorded Zymotic rate was in 1893 when it was 3.71, the lowest in 1894 when it was 0.80 per 1000 per annum.

The Zymotic deaths were distributed as follows :-

Ward,		Ward, Number of Deaths.			Zymotic Death-rate	
East				37	2.4	
Central				7	0.4	
West				2	0.3	
St. Mary's				22	2.3	

The Zymotic deaths in Institutions have been distributed among the Wards to which they belong as far as possible.

The 68 Zymotic deaths resulted from the following diseases:

Disease.	Total.	Males.	Females.
Influenza	 4	4	-
Scarlet Fever	 I	- 0	I
Whooping Cough .	 2	I	1
Diphtheria	 . 5	3	2
Rotheln	 . I	-	1
Enteric Fever	 9	7	2
Diarrhœa	 . 25	10	15
Syphilis	 I	-	I
Septicæmia	 . 2	-	2
Ague	 . 1	1	-
Puerperal Fever .	 . 1	-	1
Measles	 . 16	10	6
Totals	 . 68	36	32

INFLUENZA.

Some few cases occurred early in the year and caused four deaths as compared with 33 in the previous year.

SCARLET FEVER.

The one death was in the case of a young child who from a previous mild case not notified until late took a severe form of the disease and rapidly died. There was also one death in 1895.

WHOOPING COUGH.

This disease was slightly epidemic and caused two deaths, as compared with 14 in 1895.

DIPHTHERIA.

Five deaths occurred-6 in 1895.

ENTERIC FEVER.

This disease has been previously dealt with in this report. The varying type of severity is shewn by the fact that in the Bourne Stream epidemic, of 59 cases but two died including the case in London, whereas of the 5 cases in Tower Street 3 died.

DIARRHŒA.

Death from this disease has been commented on under the heading of Infantile Mortality. Two of the fatal cases were in old people.

MEASLES.

The general epidemic was a mild one. Sixteen deaths occurred as compared with 55 in 1893, 0 in 1894, and 4 in 1895.

No death from Variola was registered, the one patient had but a mild attack.

Dietic Diseases.

From these diseases one adult male died of Chronic Alcoholism. It is obvious that the majority of deaths from such causes as Chronic Alcoholism are naturally referred to diseases of organs, such as kidneys and liver, which are particularly affected by alcohol, and, therefore, are included among "local diseases."

Constitutional Diseases.

Of these diseases (deaths from which are detailed in the appendix) there are three classes to be especially noted, viz.: The various forms of Rheumatism, of Cancer and of Tuberculous Diseases.

RHEUMATISM.

Four deaths were registered from Rheumatic Diseases as against two in 1895.

CANCER.

This term is popularly used to include all malignant growths, and not merely the carcinomata class, and is used here in the same sense.

In Eastbourne in 1896 there were 35 deaths from this disease. In previous years the deaths were 37, 36, 25 and 27, respectively.

As usual more females than males were affected. The total of 35 comprised 27 females and 8 males.

PHTHISIS.

During 1895 the number of deaths from Phthisis registered was 46, including 24 males and 22 females. The death-rate for the year from this disease was 1.05 per 1000, the rate for females being less than that for males as usual throughout the country. The rate in 1895 was 1.2 per 1000.

The age period 25-35 suffered most with 16 deaths; in the age period 5-15 there were no deaths from Phthisis.

Compared with previous years the deaths from Phthisis and other Tubercular diseases have been as follows:—

	Number of Deaths.				
Diseases.	1892	1893	1894	1895	1896
Phthisis	38	39	40	51	46
Other Tubercular Diseases	32	16	19	14	19

The attention of the Sanitary department has been especially directed to the obviating of probable causes of Phthisis and other Tubercular diseases during 1896.

Developmental Diseases.

Premature birth caused the death of eleven males and ten females, a total of 21 as compared with 20, 18, 15, and 35, in the four previous years respectively. Poverty being one of the predisposing causes of premature births, the majority of deaths from this cause were in the East and St. Mary's Wards.

Congenital malformations caused 2 deaths, also both in the East Ward.

Sixteen deaths were ascribed to "Old Age."

Local Diseases.

Diseases of the Nervous System caused 39 deaths, as compared with 48 in 1893, 44 in 1894, and 45 in 1895; the majority of these were from "Apoplexy." "Convulsions" caused 6 deaths in infants, 3 being of males. "Convulsions" is a vague term, and refers to a symptom rather than to a disease.

Diseases of the Circulatory System caused 30 deaths in 1896, as compared with 42 in 1893, 41 in 1894, and 35 in 1895.

Diseases of the Respiratory System caused 72 deaths in 1896, 59 in 1895, 71 in 1894, 92 in 1893, and 82 in 1892.

Arranged according to the quarters of the year, the deaths in 1896 from these diseases occurred as follows:—

First Quarter, 26. Third Quarter, 10. Second Quarter, 18. Fourth Quarter, 18.

Bronchitis was the chief cause of death in this group, and accounted for 40 deaths. As usual, young and old persons suffered mostly, only 8 of the deaths being of persons between 5 and 65 years of age.

Deaths from Violence.

There were fifteen deaths from violence, the number of deaths in 1895, 1894, 1893, and 1892 being 11, 11, 16, and 13 respectively.

The ages ranged from under one to over 65.

There were five suicides. In 1895 there were four suicides, in 1894 one, and in 1893 seven.

The deaths from violence were in the proportion of 0.34 per 1000 of the population (0.60 per 1000 for England and Wales in 1896).

Uncertified Deaths.

This very unsatisfactory class of deaths included two, one very young child and one adult.

Inquests.

Twenty-five inquests were held, i.e., on 5.5 per cent. of the deaths (England and Wales in 1896, 6.2 per cent.)

The Verdicts were as follows:—Natural Causes, 13; Accidental Deaths, 5; Misadventure, 1; Suicides, 5; Found Drowned, 2.

The deaths were of 10 men, 6 women, and 9 children.



SANITARY WORK, 1896.

Tables are appended shewing some of the work done by the Department during the past year, but the work is only inadequately described in such a way.

SANITARY CERTIFICATES.

During 1896 eighty-three Sanitary certificates were issued as compared with eighty-one in 1895. In the past five years 521 of these certificates have been issued and as they mostly relate to old houses brought up to date in sanitation, the figures represent a very large amount of work and improvement. Visitors in increasing numbers demand the certificate as a condition of occupying a house. The form of certificate is a satisfactory one as it shews on its face what is certified to. The general use of the "water" test as the only one relied on by the department has had a beneficial result on the health of the Borough. In some places a certificate is issued merely on a smoke test. The smoke test for underground drains is mainly a waste of time and expense, and worse than useless in that it may induce a false sense of security. For over ground and visible work the smoke test is of course valuable.

REFUSE REMOVAL.

Thirty-five complaints as to non-removal were received in 1896. This is a very small number considering the size of the borough. The ancient dust hole is becoming an exception in Eastbourne, iron dust bins taking its place.

SLAUGHTER-HOUSES.

The Slaughter-houses of the Borough are now six in number. In St. Mary's Ward are the "Upwick" and "Ocklynge" houses, and in the East Ward "Bourne Street," "The Crumbles," "Latimer Road," and "Chapel Drove" slaughter-houses.

Some of the Butchers slaughter outside the Borough, and others import meat from London and elsewhere.

Four of the six slaughter-houses are licensed, viz.: Upwick, Ocklynge, Latimer Road, and the Crumbles houses,

As regards "Bourne Street," the owner has been permitted to rebuild on the same place in spite of the objections of the neighbours and the Sanitary Officials, and a slaughter-house is being erected which except for its situation will be probably quite satisfactory.

The "Chapel Drove" slaughter-house is not yet satisfactory.

With the licensing and amending of the above the possibility of an Abattoir and proper inspection becomes more remote.

COMMON LODGING HOUSES.

One registered Common Lodging House exists in Eastbourne, and other houses are similarly used but can be only partially dealt with, as there is not sufficient accommodation elsewhere. These houses are visited regularly, but the conditions are most unsatisfactory.

As regards the proposed Municipal Common Lodging House, a site has been selected and the plans approved by the Committee so that its erection is a little more possible than it was a year ago.

ANALYSES.

Eighty-three samples were analysed by the Borough Analyst during 1896, and only one was found to be adulterated, viz.: a sample of whiskey.

In 1895 one hundred samples were taken and ten were adulterated. The improvement in 1896 is very marked and satisfactory.

The articles taken are set out at length in one of the tables.

In the one case of adulteration there was a prosecution, followed by conviction and fine.

Unsound Food.

The tables appended shew some of the work done in this respect, but a large number of warnings were given and not recorded, where no further proceedings were necessary. There were ten prosecutions as shewn in the tables.

OVERCROWDING.

Overcrowding is difficult to deal with in Eastbourne owing to the want that exists of small, cheap cottages. There was but one prosecution, but there were many cases where warnings and notices were given to abate the nuisance.

The tables shew the work done as regards Cowsheds, &c.

Office Work during 1896.

Calls and Communications received and entered		2,722
Letters and Reports written		1,202
Dust Complaints received		35
Entries made in Inspectors' Journal		676
Entries made in Register of Defects and Nuisances		311
Notices Issued		378
Entries made in Register of Samples taken		103
Returns of Inspectors' Work made to Committee		21
Entries made in Notification Register		228
Monthly Returns on the Health of Eastbourne to Me		
of Sanitary Committee		160
Entries made in Voluntary Sanitary Register		83
Sanitary Certificates Issued		83
Entries made in Register of Cowsheds and Dairies		36
C I'C I CD 'I I' I I I	777	5
Entries made in Register of Bake-houses		147
Entries made in Register of Slaughter-houses		109
Entries made in Register of Seizures of Unsound Mes		13
Entries made in Register of Letters requesting Amend	ments	163

Notices Issued in 1896.

WEST WARD.

Section of Act.	No. Issued.	No. com- plied with.	No. Lapsed.	No. Outstanding.
a Sec. 91 Public Health Act	12	12	_	_
f Sec. 46 , ,	4	4	-	-
g Sec. 34 Factory and Workshops Act, 1878	I	1	-	-
Totals	17	17	-	-

52

ST. MARY'S WARD.

Section of Act.	No. Issued.	No. com- plied with.	No. Lapsed.	No. Outstanding.
a Sec. 91 Public Health Act	52	39	2	11
b Sec. 36 ,, ,,	5	2	I	2
c Sec. 41 ,, ,,	46	42	_	4
e Sec. 106 ,, ,,	18	8	3	7
g Sec. 34 Factory and Work- shops Act, 1878	7	6	-	1
h Housing of the Working Classes Act	3	-	-	3
Totals	131	97	6	28

CENTRAL WARD.

Section of Act.	No. Issued.	No. com- plied with.	No. Lapsed.	No. out- standing.
a Sec. 91 Public Health Act	61	44	10	7
b Sec. 36 ,, ,,	13	8	3	2
c Sec. 41 (& 19 of 1890 Act)	8	8	-	-
f Sec. 46 ,, ,,	10	10	-	_
d Sec. 49 ,. ,,	7	7	-	-
e Sec. 106 East Imp. Act	28	22	2	4
g Sec. 34 Factory and Workshops Act, 1878	2	2	-	-
Totals	129	101	15	13

EAST WARD.

Section of Act.	No. Issued.	No. com- plied with.	No. Lapsed.	No. out- standing.
a Sec. 91 Public Health Act	31	16	6	9
b Sec. 36 ,, ,,	6	4	2	-
o Sec. 41 (& 19 of 1890 Act)	4	-	4	-
f Sec. 46 ,, ,,	18	18	-	-
d Sec. 49 ,, ,,	2	2	-	-
e Sec. 106 East Imp. Act	3	2	I	-
g Sec. 34 Factory and Work- shops Act, 1878	4	4	_	_
h Housing of Working Classes Act	33	-	33	
Totals	101	46	46	9
Grand Totals	378	261	67	47

- a To abate nuisances of various sorts.
- b To provide proper closets, dustbins, &c.
- e To relay and repair defective drains.
- d To remove offensive accumulations.
- e To separate the water systems of closets from those for domestic use.
- f To cleanse, disinfect, &c., houses.
- g To lime wash, &c., bakehouses.
- h To make houses fit for human habitation.

In addition to these Statutory notices, 163 informal letters requesting amendment of premises were issued (73 of which were complied with) which otherwise would have necessitated the issuing of two, and in some instances three, notices in each case.

Return of Work under Food and Drugs Act, 1896.

Foodstuffs, &c.	Samples	Retu	rned as	Deceading 8.
Poodstuns, &c.	taken.	Genuine. Adulterat'd		Proceedings, &c.
Milk	40	40	-	
Butter	10	10	-	
Lard	1	1	-	
Honey	2	2	-	
Paregoric	6	6	-	
Precipitated Sulphur	2	2	-	
Brandy	2	2	-	
Gin	. 3	3	-	
Whiskey	13	12	1	One prosecution and conviction.
Bitter Beer	. 1	1	-	
Rum	2	2	-	
Totals	82	81	I	

Dairies, Cowsheds and Milkshops' Orders of 1885-6.

	West Ward.	S. Mary's Ward.	Central Ward.	East Ward.	Totals.
Number of Dairies on Register	3	4	6	5	18
Number of Cowsheds	2	3	-	1	6
Number of Milk Shops	7	I	5	22	35
Infectious disease among employees	1	ı	_	-	2
Infectious illness on premises		-	_	ı	I
Notice to abate nuisance	I	3	-	-	4
Number Registered in 1896	-	-	1	I	2
Number removed from Register in 1896	-	I	ı	I	3

Infectious Disease.

	West Ward,	S. Mary's Ward.	Central Ward.	East Ward.	Totals.
Number of cases notified	21	96	33	73	223
Number removed to Sana- torium	9	55	26	49	139
Number of houses disin- fected	22	36	28	51	137

Legal Proceedings, 1896.

No.	Nature of Offence.	Date of Hearing.	Result.
1	Default in complying with notice to abate nuisance	Ja:.uary 13th	Order made on defendant to do the work and pay costs,
2	Default in complying with notice to abase nuisance		Order made on Jefendant to do the work and pay
3	Selling adulterated whiskey	February 3rd	costs. Fined 8s. and £1 14s. costs.
4	Unlawfully exposing, without previous disinfection, certain clothing which had been exposed to a dangerous infectious disorder		Dismissed with a caution,
5	Default in complying with notice to abate a nuisance from overcrowding	April 27th	Order made to reduce number of occupants and pay costs 10s. 6d.
6	Default in complying with notice to abate nuisance	July 13th	Fined 1s. and 9s. costs.
7	Default in complying with notice to provide efficient flush to w.c Eastbourne Improvement Act, 1885 Preventing Inspector from ex-	,, ,,	Order made for works to be done and pay costs 8s. 6d.
	amining meat in butcher's		Fined 29s, including costs.
9	Preventing Inspector from ex- amining meat in butcher's shop		Case withdrawn.
10	Obstructing Inspector while carrying out provisions of Public Health Act	f l	Case withdrawn.
11	Exposing for sale unsound pears	August 19th	Fined 1s. and 19s. costs.
12		September 14th	Fined 20s. and £1 10s. 6d. costs.
13	Default in complying with notice to abate nuisance	October 9th	Order made on defendant to do the work and pay
14	Exposing for sale unwhole some fish	November 6th	costs.
15	Exposing for sale unsound pomegranates	November 16th	Withdrawn on defendant paying costs, 4s. 6d.
16		" "	n n
17	" " "	" "	
18	n n r		" " "
19	" " "		" " "
20	n n n		" " "
21	1 11 11	,, ,,	9 11 11

Unsound Meat, &c.

LEGAL PROCEEDINGS.

Description and Quantity of Articl	e.	Where exposed for Sale.	Result of Legal Proceedings.
Dutch Cheese, 31		No. 12, Ocklynge Road	Fined £1 & £1 10s. 6d.
A quantity of Pears		Grand Parade	Fined 1/- & 19/- costs
Herrings, 350		Seaside Road	Fined £2 & 17/- costs
Pomegranates, 17		No. 15, Junction Road	Withdrawn on payment of costs
,, 26		No. 18, Junction Road	Withdrawn on payment of costs
,, 10		No. 22, Pevensey Road	Withdrawn on payment of costs
" 8		No. 56, Terminus Road	Withdrawn on payment of costs
,, 18		No. 11, Arundel Terrace	Withdrawn on payment of costs
,, 10		No. 6, South Street	Withdrawn on payment of costs
,, 18		No. 42, South Street	Withdrawn on payment of costs

Unsound Meat, &c., Destroyed,

BUT NO LEGAL PROCEEDINGS TAKEN.

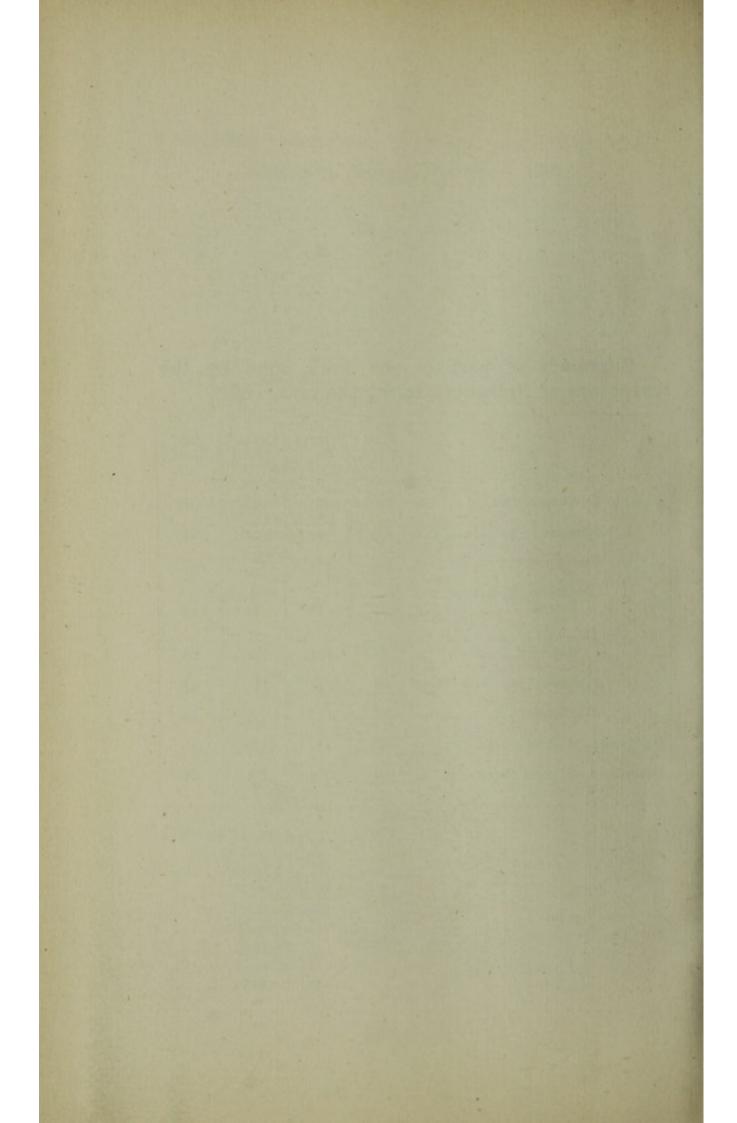
Description of	of A	rticle	e.	At whose Orders destruction was carried out.
Cherries, 21 lbs.				 H. D. Farnell, Esq., J.P.
Medlars, 50 lbs.				 Nevill Strange, Esq., J.P.
Water Melons, 14				 E. W. Shaw, Esq., J.P.

Premises receiving constant inspection and attention during the year 1896.

			WES	ST W	ARD					
Numbe	er of	Bakehouses								2
,,	,,	Cowsheds								2
,,	,,	Farmyards								4
"	"	Dairies and Milk	shops							IO
"	"	Private Stables								45
,,	,,	Livery Stables								5
"	,,	Piggeries								2
,,	"	Slaughter House								Nil.
, 11	"	Offensive Trades								Nil.
		S'	Г. МА	ARY'S	WA	RD.				
Numb	er of	Bakehouses								8
		Cowsheds				***		•••		3
,,	"	Farmyards								3
"	"	Dairies and Mill								5
"	"	Private Stables								50
"	"	Livery Stables								8
,,	"	n								4
"	,,	Slaughter House								2
"	,,	Offensive Trade:								Nil.
190		,	CENT	DAI	TATA	DD				
			CENI	KAL	WA	KD.				
Numt	per of	Bakehouses						•••		16
"	"	Cowsheds	•••							Nil.
"	1.	Farmyards			***			•••		Nil.
"	"	Dairies and Mill								II
,,	11	Private Stables								90
"	"	Livery Stables			***					12
"	"	Piggeries				•••			****	Nil.
. "	33	Slaughter House		***					***	Nil.
"	**	Offensive Trade	S	***					**	Nil.
			EAS	ST W	ARD).				
Numb	per of	f Bakehouses								16
",	,,	Cowsheds								I
,,	,,	Farmyards								Nil.
"	"	Dairies and Mil	kshops							27
12	,,	Private Stables								54
"	"	Livery Stables								3
"	,,	Piggeries								5
"	"	Slaughter Hous	es		***					4
,,	"	Offensive Trade					,.,			3

Summary of part of the work done by the Inspectors of Nuisances during the year, 1896.

		West Ward.	S. Mary's Ward.	Central Ward.	East Ward.
Visits to	Dwelling-houses	136	225	258	347
"	Schools	25	23	22	245
,,	Stable and similar premises	124	165	385	78
"	Cowsheds, Milkshops and Dairies	12	36	33	14
"	Slaughter-houses and Butchers' Shops	30	101	110	96
"	Fruiterers' and Fish Shops	74	14	115	43
,,	Bakehouses	II	37	59	52
Re-inspe	ctions of premises	242	236	1328	1146
Drains a	nd soil pipes tested	100	87	174	83



Appendix.

77600

TABLE I.

Table shewing the Births and Marriages and Deaths, at certain age periods, in Eastbourne for 1896, and for the 10 preceding years.

	Popula-				Deaths r	egistered.	
Year.	tion esti- mated at middle of Year.	Births regis- tered.	Mar- riages.	At all ages.	Under 1 year.	Under 5 years.	In Public Institu- tions.
1896	43,500	919	267	454	105	151	62
1886	27,765	889	169	443	124	164	38
1887	29,148	848	175	355	99	142	30
1888	30,600	780	206	421	89	137	46
1889	32,124	790	216	416	98	147	72
1890	33,724	735	199	485	81	161	III
1891	35,405	857	250	468	103	158	74
1892	37,168	921	236	505	153	181	73
1893	39,020	897	249	576	130	231	91
1894	40,964	975	256	430	95	119	63
1895	42,000	917	238	521	122	171	80
Average of 10 years	34,791	860	219	462	109	161	67

Table shewing the weekly Notifications of Infectious Disease during 1896.

TABLE II.

No.	Date of		ling.		Diphtheria.	Erysipelas,	Scarlet Fever.	Typhoid Fever.	Puerperal Fever.	Small-pox.	Totals.
-				-		*			-	90	
1 2	January	4	***		3		2		***		5
3	"	11	***		1		9 2	1			11 2
4	"	25						1			1
5	February	1			***		1				1
6 7	"	8 15	***		1		2			***	3
8	"	22	***		***		5		4		9
9	"	29			1		2		î	***	4
10	March	7				2	2				4
11 12	**	14 21	***	***	1	***	1 2		1	***	3 2
13	"	28							***	***	0.000
14	April	4					***	1	***		ï
15	"	11			1		1		***		2
16 17	19	18 25	***	***	***		2 3		***	***	2 3
18	May	2	***		***						
19	19	9	***		1		1				2
20	**	16	***			***					
21 22	"	23	***	***	2	1	4	1		***	5 3
23	June	6						***			
24	",	13				***	1	***			1
25	1)	20		***	1	2					3
26 27	July	27	***	***	1	ï	1 2			***	2 3 2 2
28	11	11		***	ï	î					2
29	,,	18	***				1	1		***	
30	4.17	25	***		1		1	2			4
31 32	August	8	***	***	1	2	***	2 3			5 4
33	"	15	***	***	î			2	***	***	3
34	1)	22			***		3	1		***	4
35	Soutember.	29	***	***	1	***	1	1			3
36 37	September	5 12			ï		1 2	1			3 5
38	"	19	***	***	î	***		4			5
39	**	26	***		1	1	2	21			25
40	October	3			3		2	17			22
41 42	"	10	***	**	1		***	4			5
43	"	24	***		2	2	***	4		***	8
44		31	***		***		1	5			6
45	November	7	***		9	1	3		***		8
46	"	21	***	***	2	1	3	2		***	5
48	"	28	***		1	1	2	1		***	5
49	December	5			1	1					2
50	**	12 19	***		3	***	3	3		***	3 7
51 52	"	26	***		2	***	3	1			2 3 7 6 7
	27 to				4		3				7
	To	tals			42	17	74	84	6		223

TABLE III.

Table shewing the number of Deaths from the seven principal Zymotic Diseases in the 10 years, 1886-1895, and in the year 1896.

1-				-					
.96.	Death- rate.	00.	.36	.03	¥0.	.13	.50	.27	1.85
1896.	Denths.		16	1	09	9	6	52	1.33
	Average.	6.0	8.5	1.6	11.3	55.57	2.7	24.5	2.19
	1895	63	4	1	14	*	61	36	63
	1894		:	-	-	9	4	00	20 0.53
	1893	111	55	-	230	00	00	39	141
-	1892	:	C)	1	00	10	01	55	50
	1891	:	:	1	20	333	64	00	64
	1590	1	00	1	65	80	0.9	15	3.32
-	1889	:	10		64	52	60	20	2.80
000	1989	:	-	63	17	13	4	9	41
400*	1881	1	9	1	60	6	00	35	2.19
000	1990	:	01	1	21	123	01	33	2.98
		:			-		:	:	Itton
		:		:	-		:	:	
		1						:	1,000
	1	-	:			:	:	:	e ber
		-			ugh		1	:	Totals eath-rit
		Small-pox	Measles	Scarlet Ferer	Whosping Cough	Diphtheria	Enteric Fever	Diarrhœa	Totals Zymotic Death-rate per 1,000 population

TABLE IV.

NOTIFICATIONS OF INFECTIOUS DISEASE. RETURNS FOR 1890-1895.

Sickness-rate for 1891 (estimated population, 35,405)—6:89.

" 1893 " " 39,020)—8:58.

" 1894 " " 40,964)—3:48.

" 1895 " " 42,000)—3:71.

" 1896 " " 43,500)—3:71.

66 TABLE V. ESTIMATED POPULATION, 43,500.

	1896.	Ist	2nd	3rd	4th	Vann
	1880.	Quarter	Quarter	Quarter	Quarter	Year.
			-			
.	Malas	100	***	***	-	
BIRTHS.	Males Females	105	111	124	104	444
RT	Total	227	236	244	212	475 919
BI	Equivalent annual rate per		-30		- 0	9.9
	1,000 persons	20.87	21.70	22.43	19.49	21.13
-	2011			-		
	Diphtheria	7 2	6	9	20	42
ıi.	Erysipelas Small-pox	1	3	5	7	17
Notifications	Cholara					
H	Scarlet Fever	28	14	13	19	74
CA	Enteric Fever	2	2	47	33	84
E	Puerperal Fever	6				6
TO	Typhus Fever					
Z	Relapsing Fever					
	Total	45	25	74	79	223
250	Sickness-rate per 1,000	4.13	2.29	6.80	7.26	2.13
	Males	58	57	56	62	233
	Females	62	43	66	50	221
	Total	120	100	122	112	454
1 2 2	Non-Residents		6	19	21	58
	Corrected Total		94	103	91	396
	Under I year		25	40	18	105
HS	Under I year		10	II	IO	46
AT		7 51	4	3	8	22
DEATHS.	15-65 years Over 65 years	20	37	47 21	44 32	179
	Equivalent annual rate per			-	3-	102
	1,000 perso s	17:02	9.19	11.21	10.29	10.43
111	Deaths under I year per					43
	1,000 births	96	106	163	84	114
	Death-rate excluding visi-		0.0		1 2 5	
	tors per 1,000	9.93	8.64	9.47	8.36	6.10
	Atmospheric (Mean	-				
1	Draceura Mean	30.169	30 106	29.996	29.878	30.037
	inches Inglest		30:485	30.201	30.291	30.902
.X.	(corrected)	1	29.453	28.784	28.645	28.645
000	(Mean	The state of the s	53.8	60.5	44.8	50.6
101	Temperature Highest	1000	75.0	79.0	63.0	79.0
METEOROLOGY.	Lowest		35'5	44.6	27.3	26.5
TE	Total rainfall (inches)		4.71	9.59	13.31	32.68
ME	Bright sunshine, hours re-		02012	cene	2000	TOUT
	(Prevailing direction		929°2 W.	550.2	237.7	1941.7
	Wind Mean hourly ve-	10,250,000	W.	S.W.	S.W.	S.W.
	locity (miles)		9.1	9.6	10.0	9.8
	Local (miles) in	1	1	30	100	90

TABLE VI.
g the Cames of the Deaths during 1996, divided according to Age-frouge and Wards.

est Mary's	* ! !	of 1 of	**!!***				1"	2	1 1	1	-1121+2	*		2		9 1 1		1-4+1	1701			1		** ;		-	2				100	97
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ŝi	"11212" 1	15.	11111"-		1.1	- 1	11	-		1	-11111-1-1	=	1:1	1		*11	- 1	- 1- 11		1	*11*111		1 .	11					1 1	-		
9	* 11*1*1 1	2	-111mm1	1.	1 1	- 1			1	1	-1111-1111-		1111	1.		- 1"		17 111	144.1		11111		1		1	-			1 :	1		411
	5112151 "	4	P	**	1 1		11	-		1	11-1-4-111	0			7	11"	- 1	11-11	100		1111173			111						1	-	* 11
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TABLE OF DEATHS DURING THE YEAR 1896, IN THE EASTBOURNE URBAN DISTRICT, CLASSIFIED ACCORDING TO DISEASES AGES AND LOCALITIES.

(A)

TABLE VII.

Names of Localities adopted	Morta	ality fr	om all	causes,	at sub	joined .	Ages.			Mo	rtal	ity fr	om :	ubjoi	ned	caus	es, di	sting	uishi	ng D	eath	s of	Child	ren u	nder F	ive Y	ears	of A	ge.	
for the purpose of these Statis- tics; public institutions being shown as separate localities.			1	5	15	25	65		1	2	3	4	5	6	7 ever	8	9	10	11	12	13	14		16	17	18	19	20	21	22
	At all ages.	Und'r 1 Year.	and under 5	and under 15	and under 25		and np- wards	(i)	Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas,	Measles.	Whooping Cough.	Diarrhoea and Dysentery.	Rheumatic Fever.	Phthisis.	Bronchitts, Pneumonia and Pleurisv.	Heart Disease,	Influenza.	Injuries.	All Other Diseases.	TOTAL.
East Ward	195	60	30	7	10	54	34	Under 5 5 upwards.			1 2			2						6	1	16	 1	1 19	19 26	1 5	1	3 3		90 105
Central Ward	73	13	4	3	6	24	23	Under 5 5 upwards,												2	1	2		iii	2 6	7	ï	1	9 30	17 56
West Ward	32	4	1	3	4	12	8	Under 5 5 upwards.			1													2	ï	3	1	3	3 16	5 27
St. Mary's Ward	92	23	9	8	2	27	23	Under 5 5 upwards.			2			2						3		5		7	7	5	11.		21 35	32 60
Princess Alice Hospital					6	12	3	Under 5 5 upwards.												3			1	ï	4			2	13	21 5
Union Workhouse		4	1		1	13	11	Under 5 5 upwards.																4	4	5			12	25
Ail Saint's Convalescent Hos- pital	4	1			2	1		Under 5 5 upwards.					***											ĩ	ï				1	1 3
Sanatorium	. 7		1	1		5		Under 5 5 upwards.		1				5			ï													6
Totals	454	105	46	22	31	148	102	Under 5 5 upwards.		1	3			9			ï			13	2	23	3	1 45	22 49	1 25	1 2	7 9	77 153	151 303
			The	subjoi	ned nu	mbers l	have al	so to be taker	n int	n nee	ount	in j	ıdgi	ng of	the	above	e rec	ords e	ot mo	rtali	y.									
Deaths occurring outside the district among persons belong ing thereto		***						Under 5 5 upwards.																						
Deaths occurring within the district among persons no belonging thereto	t so	5	2	4	11	26	10	Under 5 5 upwards.			1									2					5	6		4	3 28	7 51

TABLE

TABLE OF DEATHS DURING THE YEAR 189

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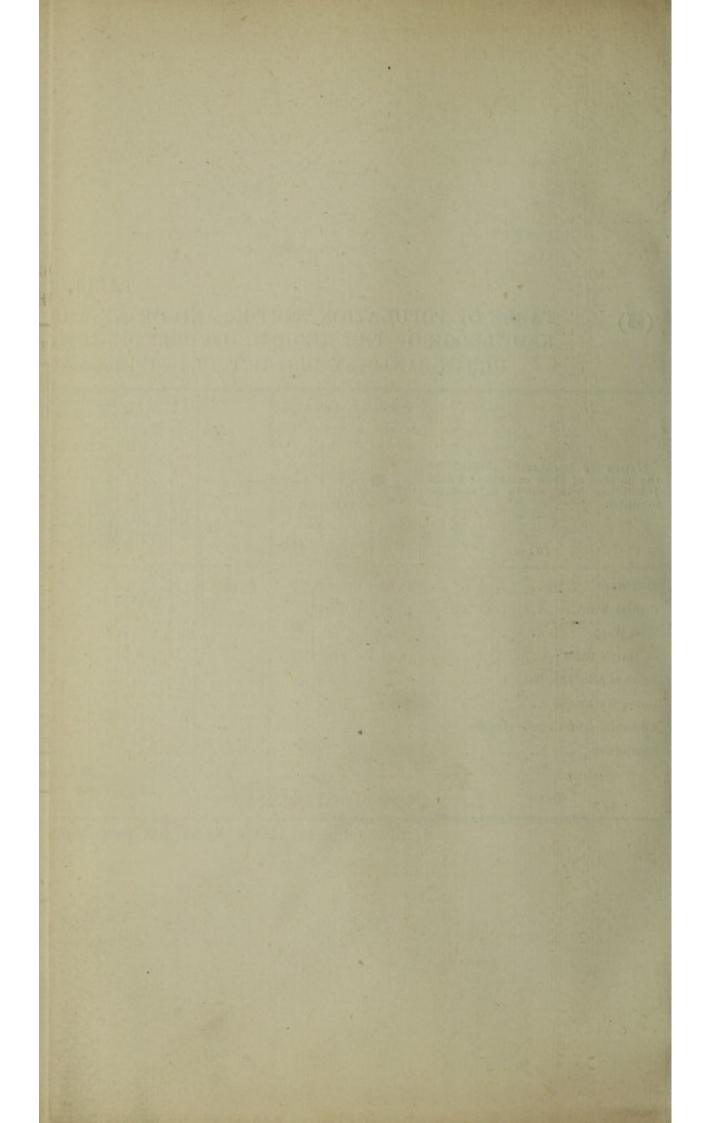
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Deaths occurring with the abstract among persons will belonging thereto

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 EASTBOURNE URBAN SANITARY DISTRICT, CLASSIFIED ACCORDING TO DISEASES, AGES, AND LOCALITIES.

	Popula	ition at al		New Cases of Sickness in each Locality, coming to the knowledge of the Medical Officer of Health. Number of such Cases removed from their Homes in the several localities for treatment in Isolation Hospital.																										
		middle		Aged under 5 or over 5.	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11	12	13
NAMES OF LOCALITIES adopted for he purpose of these Statistics; Public institutions being shown as separate ocalities. (a)	Census 1891.		Registered Births.		Smallpox.	Scarlatina,	Diphtheria.	Membranous Croup.	Typhus.	Enterie or Typhoid.	Continued.	.1 .	Puerperal,	Cholera.	Erysipelas.			Smallpox.	Scarlatina,	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing	Paerperal.	Cholera.	Erysipelas.		
Cast Ward	10,501 5,736 6,619	11,208 7,172	919	Under 5 5 upwards. 5 upwards. Under 5 5 upwards.		5 22 5 15 4 4 15 1 3	3 16 1 3 4 7 3 5 			1 13 5 2 3 56 2 1			5 1 		8 1 3 1 4 				5 22 5 15 4 4 15 1 3 3	1 10 1 1 2 2 			1 10 4 1 30 1 1 1			"i				
Totals	34,969	43,500	919	Under 5 5 upwards.	1:::	14 16	11 31		100000	80			6		1 16				14 60	2 15			2 47	::		···				

Notification of Infectious Disease has been compulsory in the District since January, 1890.





Burnush of Casthanine,
Chart showing the principal Meteorological Conditions during each day of the year 1896. (from weekly)

