

[Report 1895] / Medical Officer of Health, Eastbourne County Borough.

Contributors

Eastbourne (England). County Borough Council.

Publication/Creation

1895

Persistent URL

<https://wellcomecollection.org/works/fn6rtn59>

License and attribution

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

BOROUGH OF EASTBOURNE.



ANNUAL REPORT

FOR 1895, 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; Diplomat in Public
Health of London and Cambridge Universities.*

MEDICAL OFFICER OF HEALTH.

EASTBOURNE :

Printed by V. T. SUMFIELD, "Standard" Office, Station Street.

1896.



TABLE OF CONTENTS.

	PAGE.
1. General Account of the Borough, Population, &c....	1
2. Marriages 	13
3. Births 	14
4. Vaccination 	15
5. Infectious Diseases 	17
6. Deaths... 	39
7. Sanitary Work 	58

APPENDIX.

Tables of Society of Medical Officers of Health and others.

BOROUGH OF EASTBOURNE.

1895.

SITUATION.—Latitude, $50^{\circ} 46' N.$; Longitude, $0^{\circ} 17' E.$

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, 7·7 persons per acre; for the Town, 42.

NO. OF INHABITED HOUSES.—At Census (April, 1891), 5,190.

POPULATION.—Census (1891), 34,969; Estimated at the middle of 1895, 42,000.

BIRTH-RATE.—21·83 per 1,000.

DEATH-RATES.—Including all deaths, 12·40; and excluding deaths of visitors, 10·71 per 1,000.

Zymotic total, 2·4; and from the seven principal zymotic diseases, 1·5 per 1,000.

Infantile Mortality, 133 per 1,000 births.

MEAN ANNUAL TEMPERATURE.— $49^{\circ} 1'.$

HOURS OF BRIGHT SUNSHINE RECORDED.—1885·8.

TOTAL RAINFALL.—28·51 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 Second Annual Report on the Health of Eastbourne.

The year 1895, compared with most previous years, was, on the whole, satisfactory as regards death and disease in Eastbourne, although it did not reach the excellent standard of 1894, which was a record year not only in Eastbourne, but throughout the country generally.

The table on page 44 is interesting as shewing, in so far as the death-rate is an indication, how the Borough has exceeded in healthiness even the rural districts of England and Wales during 1895.

Among the measures carried out in 1895 the erection of a special Hospital and the provision of an Isolation Cottage were amongst the most important. As regards measures still remaining to be carried out, I would more particularly urge the necessity for enlargement of the Sanatorium, and for the provision of a satisfactory common lodging-house.

In conclusion, I beg to thank the members of the Sanitary Committee for their kindness, and to acknowledge with thanks the thoroughness and cordiality with which I have been assisted by the members of the Staff of the Department during the year.

I am, gentlemen,

Your obedient servant,

W. G. WILLOUGHBY.



THE BOROUGH.

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

Eastbourne Parish	...	...	...	4755
Norway Parish	...	...	...	655
				<hr/>
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. The statistics given below, therefore, apply to the whole Borough. It is necessary to explain this, as the same name applies also to a registration district, to a registration sub-district, and to a parish.

Although Norway still remains a separate parish it is satisfactory to note that the registration office for that parish was in September, 1895, removed from Willingdon to Eastbourne, and that now the deaths, births, &c., for the whole Borough are registered at one place, *viz.*, at the Town Hall.

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 1000 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 are 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.

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

The Princess Alice Hospital in St. Mary's Ward.

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

All Saints' Convalescent Home in the West Ward.

The Borough Sanatorium in St. Mary's Ward.

Site, Soil, &c.

The Borough is situated 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 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 a little clay and a strip of upper greensand, 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. 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 a small extent, on greensand and clay.

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

Water Supply.

The water supply of Eastbourne is in the hands of a private Company. 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 upwards towards the ground level, and reaches the surface within about a quarter-of-a-mile.

The presence of a great excess of inorganic salts in the water during part of 1895 gave rise to very considerable anxiety, although otherwise the water continued, as usual, very satisfactory.

The water during the autumn had a distinctly saline taste, due to the presence of chlorides, and was excessively hard. This excess of chlorine in salts and of hardness diminished rapidly in November, after being at its maximum

on November 2nd, the diminution being practically coincident with an increase of rainfall and the excavation of, and pumping of water to waste from, an intercepting trench on the sea side of the well and its headings, but being especially, if not entirely, due to the latter. The following table shows the variations in amount of chlorine and hardness in detail. A table of the rainfall of 1895 in Eastbourne compared with that of 1894 is also given.

Results of Analyses of the Eastbourne Water during 1895.

Date.	Hardness. in gr. p	Chlorine. er gall.	Date.	Hardness. in gr. p	Chlorine. er gall.
Usual amounts	15 to 20	5			
June 11th	15	29	Nov. 20th	35	23
„ 17th	15	29	„ 21st	35	23
July —	—	34	„ 22nd	36	23
August 31st	62	45	„ 23rd	37	25
September 17th.	62	58	„ 25th	38	25
October 7th	80	88	„ 26th	36	25
„ 9th	80	73	„ 27th	36	26
„ 12th....	67	82	„ 28th	35	26
„ 14th. ..	84	76	„ 29th	35	27
„ 15th....	84	76	„ 30th	35	27
„ 17th....	84	76	Dec. 2nd.....	34	26
„ 19th....	88	80	„ 3rd	34	24
„ 21st ...	84	82	„ 4th	34	23
„ 22nd...	100	103	„ 5th	33	23
„ 27th....	69	71	„ 6th	33½	23½
„ 28th....	84	88	„ 7th	34	24
„ 31st ...	114	108	„ 9th	34	24
Nov. 2nd.....	124	112	„ 10th	35	24
„ 4th	89	80	„ 11th	34½	24½
„ 7th	82	68	„ 12th	34	24½
„ 8th	47	40	„ 13th	34½	25
„ 9th	47	41	„ 16th	35	26
„ 11th	43	39	„ 17th	35	26
„ 12th	42	35	„ 18th	34	25
„ 13th	40	35	„ 19th	34	23½
„ 14th	37	29	„ 21st	33	22
„ 15th	36	26	„ 23rd	32	21
„ 16th	34	24	„ 27th	33	21
„ 18th	35	23	„ 30th	33	21
„ 19th	34	23			

1895 { Full Moon, Oct. 3—Nov. 2—Dec. 2 } Shewing time of Spring
 { New Moon, Oct. 18—Nov. 16—Dec. 16 } tides.

RAINFALL.

1894				1895			
January	...	...	3.58	January	...	...	3.00
February	...	...	2.59	February	...	...	0.27
March	...	...	1.26	March	...	...	2.45
April	...	...	2.12	April	...	...	2.11
May	...	...	1.86	May	...	...	0.20
June	...	...	1.69	June	...	...	0.52
July	...	...	6.58	July	...	...	3.53
August	...	...	2.02	August	...	...	2.21
September	...	...	4.34	September	...	...	1.58
October	...	...	5.56	October	...	...	3.67
November	..	...	3.92	November	...	..	5.80
December	...	...	2.73	December	...	...	3.17
Total	...	...	<u>38.35</u>	Total	...	...	<u>28.51</u>

The composition of the saline residue of the water is given below. This particular percentage composition was calculated by Dr. Otto Hehner from a sample taken at the beginning of November, and the salts were in practically similar proportions to those found in samples analysed in the same way in August and December.

Salt.	Parts per 100,000.	Percentage.
Sodium Chloride	89.79	38.79
Calcium Chloride	76.14	32.88
Magnesium Chloride	15.00	6.47
Calcium Sulphate.....	18.63	8.04
„ Nitrate	5.46	2.37
„ Carbonate	25.70	11.10
Silica	0.72	0.38
Oxide of Iron	0.11	0.04
	<u>231.55</u>	<u>100.00</u>

When the salinity of the water was at its worst the organic purity was unaffected, the free and albuminoid ammonias in the above sample for instance were 0.000 and 0.006 parts per 100,000 respectively.

The presence of so large a quantity of calcium chloride is interesting. It shows that if, as is practically certain, the salinity was derived ultimately from the sea, the salts of the sea must have undergone considerable chemical changes in the course of their long journey to the well.

As will be seen from the analyses the water had nearly regained its natural condition by the end of the year, owing to the continued pumping to waste of the water from the intercepting trench on the sea side of the well and its other headings, but it has been wisely insisted upon by the Sanitary Authority that the present well must be absolutely abandoned when the progress of new works makes it possible. The water supply of a district, and especially of a health resort, must be above suspicion, even as to its liability to too much saltiness, and a new supply either soft or capable of being softened by an easily workable process must be procured. The Corporation realising this, gave notice of intention to deposit a Bill for the provision of a new supply; this was followed by a similar notice on the part of the Company. Temporary works were at length commenced by the Company by which it is hoped a supply free from excess of salts will be maintained while the larger works are in progress.*

The position of the members of the Sanitary Committee and the Medical Officer of Health was a most unenviable one during the time of the great excess of salts in the water. On the one hand was the public complaining to them and constantly urging on them by deputations and otherwise to do "something," while on the other hand, the Water Company would not be persuaded into taking steps to abate

*At the time of going to Press the new temporary supply has been brought into use, the water being pumped from Holywell.

the saltiness of the water, which steps the Committee were, of course, unable of themselves to take, the water supply being a private monopoly. When the Sanitary Authority, which worked at the water question almost incessantly, took the only practical steps to prevent a recurrence of the scare, viz., the deposit of a Bill for the provision of a new supply and for the taking over of the Waterworks by the Corporation, a minority of the inhabitants, with a majority of votes owing to the plural voting at the poll, refused the Corporation permission to go on with the Bill. Hence the public supply will be still entrusted to the private Company, unless the Corporation obtains a purchase clause in the Company's Bill.

The lowness of the death-rate, the notable absence of Enteric (Typhoid) Fever and of Diphtheria, &c., from Eastbourne during the latter part of 1895, as described later on in this report, show that the water, though unpleasantly hard and salt, was not otherwise unsatisfactory.

It would be contrary to the best interests of the town if the new works were completed without softening works being included. The Corporation's proposed Bill included a clause for the softening of the water, and the Sanitary Committee has decided to ask the Water Company to provide a similar clause in its Bill.

Within the range of the public supply there are now very few houses obtaining their supply from other sources, viz., from private wells. So far, on analysis, the water of these wells with one exception has been found to be pure, and their continued existence is therefore allowed. The well known as "Upwick" well was closed by Magistrates' order in November, one of the owners having refused to close it voluntarily.

Population.

For statistical purposes it is important to obtain as correct an estimate as possible of the number of inhabitants

of a district since it is on this estimate that the calculations of birth, death, and other rates are based. The remoter the year from the preceding census year, the less correct this estimate is liable to be. Calculated according to the method of the Registrar-General for his statistics, the population of the Borough of Eastbourne in the middle of 1895 was 42,570; that is to say, that if the population of Eastbourne increased from 1891 to 1895 at the same rate as it increased from 1881 to 1891 the population in the middle of 1895 was 42,570.

The method of the Registrar-General is the most reliable method, but is liable to some amount of error especially where the total numbers dealt with are small as in Eastbourne. On the whole it is probable that the population is not now increasing quite at the very rapid rate as it did from 1881 to 1891, and therefore 42,000 has been taken as the probable population of Eastbourne in the middle of 1895. This number is well corroborated by estimating the population according to the number of new houses built and occupied. This estimate of 42,000 only takes visitors into consideration as far as the census (held in the month of April) did. The number of summer visitors in 1895 was very large, and as their deaths are taken into consideration in calculating the death rate, &c. (while their number is not included in the population) the death-rate, zymotic-rate, and sickness-rate of Eastbourne is over-stated rather than under-stated.

It is advisable to point this out since watering places are accused, and often only too justly, of "manufacturing" low death-rates for their returns, by excluding deaths of visitors, though including their numbers in the population, a so-called "corrected" death-rate being really very often a death-rate in want of very much correction.

The census of 1891 showed that the growth of population in Eastbourne from 1881 to 1891 was due twice as much to immigration as to excess of births over deaths, and that while the natural increase due to births was fairly equal in

both sexes, the increase due to migration was principally female.

The natural increase in 1895, *i.e.*, excess of births over deaths, was 396; if this represents but a third of the total increase the population increased in 1895 by about 1,188.

SEX CONSTITUTION OF THE POPULATION.

The sex constitution of the population of Eastbourne can best be 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 for 1895.

Year.	Males, Total.	Per- centage.	Females, Total.	Per- centage.	Total.	Excess of Females.
1881 (census)	10,060	45·7	11,954	54·3	22,014	1,894
1891 (census)	14,665	41·9	20,304	58·1	34,969	5,639
1895 (estimated)	17,165	40·8	24,835	59·2	42,000	7,670

It is improbable that this decrease in percentage of males compared with females will continually go on at the same rate.

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.

If the males and females of Eastbourne remain in the same proportion as they were in 1891, the numbers for 1895 would be 17,598 and 24,402 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 1895 population

of Eastbourne sub-divided according to age groups. The estimates for 1895 are calculated according to the tables given in the 1891 census report of the Registrar-General. The sexes are divided according to the table given above.

Ages.	Census, 1891.			Estimated, 1895.		
	Males.	Females.	Total.	Males.	Females.	Total.
0—1	344	387	731	403	474	877
1—5	1354	1422	2776	1585	1739	3324
Total under 5...	1698	1809	3507	1988	2213	4201
5—15	3727	3685	7412	4362	4507	8869
15—25	2848	5161	8009	3334	6313	9647
25—65	5786	8771	14557	6772	10728	17500
65 and upwards...	606	878	1484	709	1074	1783
Totals	14665	20304	34969	17165	24835	42000

The percentage composition of the population of Eastbourne at different groups of ages is as follows. The figures for England and Wales are added for comparison, and the figures for 1891 are chosen, since the exact number of the population is only known in the census year :—

Age Groups.	Eastbourne, per cent.	England and Wales, per cent.
Under 5 years of age	10·02	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 the population have an important bearing on the death and other rates. Other things being equal a population with an excess of females or of persons between 1 and 5, 5 and 15, and 15 and 25 should have a lower death-rate.

Eastbourne has a large excess of females, and the death-rate therefore should normally be somewhat lower than usual.

The death-rates at the various age groups and of the different sexes form the only fair basis of comparison of death-rates of different districts.

The distribution of the population according to Wards is shewn in the subjoined table. The 1895 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 1895. (Estimate).
East	12113	14776
Central	10501	11624
West	5736	6962
St. Mary's	6619	8638
	<hr/>	<hr/>
Totals	34969	42000
	<hr/>	<hr/>

The increase for the year 1894-5 was principally in the East Ward. The Central Ward had a larger increase than usual owing to the opening of Leaf Road, otherwise that Ward is necessarily practically stationary as regards the the building of new houses.

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 1895.	Persons per house 1891 Census.	Houses certified in 1895.*
East	1927	257	6.2	66
Central	1528	64	6.8	38
West	716	101	8.0	24
St. Mary's	1019	244	6.5	30
	—	—	—	—
Totals	5190	666	6.7	158
	—	—	—	—

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

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 mere number of persons per house is no criterion as to the amount of, or existence of, overcrowding.

According to parishes the largest number of persons per house is in St. John's parish, viz.: 8.5; the smallest number in Norway, viz.: 5.4 per house.

The population density in the Borough as a whole in 1895 was 7.7 per acre; in the part of the Borough built over, it was approximately 42 persons per acre.

MARRIAGES.

The number of marriages recorded in the Borough during 1895 was 238, equal to a marriage rate of 5·66 per 1000 persons living. The number in 1894 was 256 and the rate 6·24 per 1000 persons.

The marriages recorded in previous years in Eastbourne have since 1884 averaged 217 yearly.

The average annual marriage rate throughout England and Wales for the decennial period 1883-1892 was 14·9.



BIRTHS.

The births registered during 1895 numbered 917, and comprised those of 513 males and 404 females.

There were 267, 212, 231, and 207 births in the four quarters of the year in order respectively.

The birth-rate for the year was 21·8 per 1000 per annum. In only one other year, viz., 1890, was it as low as this.

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.	Eastbourne, Birth-rate per 1000 living.	England & Wales, Birth-rate per 1000 living.
1885	922	34·86	32·9
1886	889	32·01	32·8
1887	848	29·09	31·9
1888	780	25·49	31·2
1889	790	24·59	31·1
1890	735	21·79	30·2
1891	857	23·18	31·4
1892	921	24·77	30·5
1893	897	22·99	30·8
1894	975	23·8	29·6
1895	917	21·8	30·3

Of the total number of births registered, 44 were illegitimate, being in the proportion of 48 to 1000 births.

The average proportion of illegitimate to legitimate births in recent years throughout England and Wales, up to 1892, was about 47 to each 1000 births.

VACCINATION.

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

***Vaccination Returns for Eastbourne (Civil Parish).**

Year.	Births registered.	Successfully Vaccinated.	Percentage of Children born, Vaccinated.
1883	890	699	78·54
1884	935	692	74·01
1885	1002	650	64·87
1886	984	631	64·12
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

* From figures kindly supplied by Mr. J. Nicholls,
Vaccination Officer.

The percentage of infants vaccinated shews an increase in 1895, due probably to the fact that a few cases of Variola occurred in the Borough and alarmed the parents. Fortunately by the erection of a special hospital, by the addition of an isolation or quarantine cottage (willingly used by relatives of patients) and by enforcement of adequate house and other disinfection by qualified Inspectors, additional

effective means of fighting Variola have been brought into play in Eastbourne ; these can never, however, replace, but should accompany, vaccination as precautions against Variola. It is evident that an unfortunate apathy, and not disbelief in the efficacy of vaccination, is very much the cause of the decline in vaccination in Eastbourne, for, owing to the existence of the cases of Variola referred to, very much vaccination and re-vaccination was done in Eastbourne during 1895 and not included in the above returns. This re-vaccination thoroughly protected those medical men, nurses, servants, friends of patients, &c., who had to be exposed to the infection from time to time, not one of those re-vaccinated taking the disease although in some instances brought freely and even constantly into contact with it.



INFECTIOUS DISEASES.

Throughout the year 1895, Eastbourne was comparatively very free from infectious diseases, and except for 1894, was the best year in this respect yet recorded. There was no epidemic of infectious illness, but imported cases started two outbreaks involving respectively 20 cases of Scarlet Fever and 18 notifications of Variola, and helped to make up a total that otherwise would have been by far the smallest on record. These two outbreaks are dealt with later on. The following table shews the annual number of cases since the date of the adoption of the Notification of Infectious Diseases Act, and the sickness-rate for each year.

Year.	Total number of cases notified.	Sickness-rate per 1000 of population
1890	569	16.53
1891	243	6.94
1892	179	4.81
1893	335	8.58
1894	143	3.48
1895	156	3.71

A complete table giving details of the various diseases notified from January, 1890, to January, 1896, and divided according to the years and the quarters of each year, is given in the appendix.

It will be noticed that, apart from the Variola cases due to importation from London, there were fewer notifications in 1895 than in any previous year since the adoption of the Act.

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 1894 in the West and St. Mary's Wards:—

Notification.	Wards.				The Borough.
	East.	Central.	West.	St. Mary's.	
Diphtheria	13	8	4	11	36
Scarlet Fever ...	19	7	7	26*	59
Enteric ,, ...	5	5	3	5	18
Puerperal ,, ...	2	—	—	1	3
Erysipelas	6	5	1	9	21
Small-pox	2	—	—	16	18
Membranous Croup.	1	—	—	—	1
Total	48	25	15	68	156
Sickness-rate.....	3·24	2·15	2·15	7·87	3·71

* Including the 20 cases from one School.

The Central Ward, as was the case in the previous year, had (except for the West Ward) proportionately a smaller amount of infectious disease than the other Wards, whereas St. Mary's Ward in both years had proportionately the largest amount of infectious disease. The large sickness-rate of St. Mary's Ward is however distinctly accounted for by importations from other towns of illnesses leading to 20 cases of Scarlet Fever in a school, and to 16 notifications of Variola. Apart from these 36, the sickness-rate for St. Mary's Ward would have been 3·6 instead of 7·8.

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, 1895.

AGE INCIDENCE.

Disease.	0—1	1—5	5—15	15—25	25—65	65 and upwards
Scarlet Fever	—	3	40	13	3	—
Diphtheria	—	4	15	6	11	—
Membranous Croup	—	1	—	—	—	—
Enteric Fever.....	—	2	2	2	12	—
Erysipelas	—	—	2	1	14	4
Puerperal Fever...	—	—	—	—	3	—
Variola	1	5	2	2	8	—
Totals.....	1	15	61	24	51	4

SEX INCIDENCE.

Disease.	Males.	Females.	Totals.
Scarlet Fever	34	25	59
Diphtheria	10	26	36
Membranous Croup...	—	1	1
Enteric Fever	11	7	18
Erysipelas	6	15	21
Puerperal Fever	—	3	3
Variola	9	9	18
Totals	70	86	156

In attempting to trace the origin of the 156 cases notified it was found that 55 were in all probability imported

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

Of these 55 cases 26 were Scarlet Fever, 4 Diphtheria, and 7 Enteric Fever cases. It is very possible that others also were due to convalescent visitors.

HOUSE DISTRIBUTION.

The 156 notified cases of illness occurred in 113 different houses, being an average of 1·3 cases per house.

In 94 houses one case occurred in each	...	94
In 14 houses two cases occurred in each	...	28
In 3 houses three cases occurred in each	...	9
In 1 house eight cases occurred ...	...	8
In 1 house seventeen cases occurred	...	17
		<hr/>
		156

The seventeen cases in one house were cases of Scarlet Fever in a school, due to importation of a previous case on the return from the vacation. Nine were notified in two days, and all except one of the cases occurred at the same time.

The eight cases in one house were cases of Variola, where the first case had existed without notification for three weeks.

The three houses with three cases each had cases of Scarlet Fever solely, except in one where two of the patients had Erysipelas.

In three instances there were two different diseases in a house, but all three were hospitals as specified below.

The following table shews the numbers 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	4	5	1	6	—	16
Scarlet Fever	13	12	—	5	3	33
Diphtheria	11	17	2	5	—	35
Small-pox	2	3	—	3	—	8
Puerperal Fever ...	1	1	1	—	—	3
Membranous Croup	1	—	—	—	—	1
Erysipelas	10	6	—	2	2	20
Total	42	44	4	21	5	116

The total comes to 116 instead of 113, because in three houses instances of two diseases occurred, viz: In the Princess Alice Hospital, one case of Scarlet Fever and two of Erysipelas; at the Sanatorium, one of Scarlet Fever and one of Diphtheria (both in nurses); and at All Saints' Convalescent Home, one each also of Scarlet Fever and Diphtheria.

The number of houses mentioned above includes all houses from which notifications came, including those where the disease was afterwards found to be in reality non-notifiable.

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

Intercourse in Schools is a fruitful cause of spread of infectious diseases as a rule, and one set of 20 cases of Scarlet Fever occurred in 1895 in connection with a particular School, only three of these however being of persons outside the School. There was no "milk" epidemic, nor did any laundry act as a centre for the spread of disease. The cases

beyond those already mentioned were for the most part isolated cases, and in many instances the most diligent investigation failed to trace the definite cause, although possible causes were nearly always obtained.

REMOVALS TO THE SANATORIUM.

The comparative freedom of the Borough from infectious disease in 1895 is due to a great extent to the large number out of the cases notified which were thoroughly isolated at the Borough Hospitals. The patients received at these hospitals are those suffering from Variola, Scarlet Fever, Enteric Fever and Diphtheria, and of the notified cases the percentage so isolated was just over 76.

Each case removed means one centre less from which infectious disease may be disseminated, and not only is the danger and risk of illness, and even death, lessened for those around the patient, but the patients themselves stand a better chance of recovery.

The advantages of the Sanatorium are somewhat curtailed at present for want of an additional building in which to receive doubtful cases of the above diseases.

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

In 1892, 56·9 per cent. of the cases.

In 1893, 64·5 „ „

In 1894, 72·9 „ „

In 1895, 72·5 „ „

The percentages of cases removed in 1895 of each disease were as follows :—

Disease.	Number of cases notified.		Number removed.		Percentage of Removals.	
	1894	1895	1894	1895	1894	1895
Scarlet Fever	67	59	48	56	71·6	94·9
Diphtheria	40	36	29	18	72·5	50·0
Enteric Fever... ..	15	18	12	8	80·0	44·4

The highest percentage of cases was removed from among the poor. This is as it should be, seeing that it is in the smaller houses that isolation is practically impossible and a dead letter. The old prejudices against an isolation hospital are fortunately disappearing with the advance of education and with the improvements in the hospitals themselves.

The percentage of removals of cases of the above three diseases would have been higher except for the fact that Variola was for some time being treated at the Sanatorium ; this will not again be the case.

In the above three diseases, including Membranous Croup as Diphtheria, the fatality of the cases which were removed to the Sanatorium was 4·7 per cent.; of the remaining cases, *i.e.*, those not removed to the Sanatorium, the fatality was 17·2 per cent.

In 1893 the fatality for these diseases was 7·8 per cent. in the Sanatorium cases, and 12·1 per cent. in the remaining cases. The difference is due mainly to the nursing 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.

VARIOLA.

Eighteen notifications of Variola were received ; three of the cases were not Variola, but were cases of diseases similar in appearance.

The first case was notified on August 1st ; the last case left the Hospital well, on December 24th. All 18 cases were isolated on notification.

These fifteen cases were comprised in two distinct outbreaks as follows :—

(a) An outbreak of two cases in the East Ward, the first case being notified on August 1st, the second on August 14th. These cases were those of a male, aged 31, and a female (mother of the first) aged 64. Both of the patients died.

(b) An outbreak of 13 cases in St. Mary's Ward in the Old Town. For three weeks the disease had been existing in a house and no notification was sent in, hence the remainder of the cases, eight of which occurred in the one house in which the outbreak originated. The people from this house having mingled freely with other people, even in shops, with the disease still on them, it was a most fortunate circumstance that only five other persons beyond the household were affected. This outbreak caused no deaths.

After careful and prolonged investigation of possible causes it was found probable that the cause of the first outbreak was direct infection from a tramp, although no tramp with Variola was actually discovered.

The first patient was a confirmed drunkard, spending very much of his time in a public-house with tramps passing through the Borough; the house in which he lived was very dirty.

The cause of the second outbreak was in all probability the importation of some cheap clothing from a firm of tailors in the East of London, who give out their work to persons mostly poor, who take it to their own homes to complete. This clothing arrived in Eastbourne and was used at the house in which the first patients of the second outbreak lived, about the time when the disease might have been "taken" by these patients.

There was throughout 1895 Variola in London, especially in the summer, and Eastbourne is in such constant inter-communication with London that it is fortunate no other importation of Variola occurred.

The following is a list with some particulars of each of the fifteen cases :—

No.	Sex.	Age.	Date of Onset.	Date of Notification.	Probable Origin.
1	M.	31	July 28th ..	Aug. 1st ...	Imported infection from tramp.
2	F.	64	Aug. 14th ...	Aug. 14th...	From No. 1.
3	F.	40	Aug. 20th ...	Sept. 14th...	Imported infection from clothing.
4	M.	30	Sept. 2nd ...	Sept. 14th...	Ditto.
5	M.	1½	Sept. 4th ...	Sept. 14th...	From No. 3 or No. 4.
6	F.	4	Sept. 7th ...	Sept. 14th...	Ditto.
7	F.	11½	Sept. 10th...	Sept. 16th...	Indirectly from No. 3 or No. 4.
8	F.	15	Sept. 1st ...	Sept. 16th...	Ditto.
9	M.	5	Sept. 21st ...	Sept. 21st ...	From No. 3 or No. 4.
10	M.	4	Sept. 21st ...	Sept. 21st ...	Ditto.
11	M.	35	Sept. 24th...	Sept. 24th...	Ditto.
12	F.	32	Sept. 24th...	Sept. 24th...	Ditto.
13	M.	22	Sept. 28th...	Oct. 1st.....	Indirectly from No. 4.
14	F.	42	Oct. 13th ...	Oct. 15th ...	Indirectly from No. 3 or 4 through No. 7.
15	M.	37	Oct. 24th ...	Oct. 27th ...	Indirectly from No. 3 or No. 4.

Nos. 1 and 2 were son and mother respectively.

Nos. 3, 4, 5, 6, 9, 10, 11, and 12 were the whole of the inmates of one house and formed two complete families of father, mother, and two children each.

Nos. 7 and 14 were daughter and mother respectively.

Nos. 8, 13, and 15 were inmates of separate houses in the neighbourhood of the house of Nos. 3-6 and 9-12.

Case No. 15 is not easily accounted for, except that an inmate of his house visited Nos. 3, 4, 5 and 6, unwitting

of their having Variola, while the disease was at a most infectious stage. No. 15's illness, however, developed more than six weeks later than the date of this visit.

The origin of case No. 14 also is not very evident.

Another child of this patient, besides case No. 7, was isolated as a doubtful case, and the mother elected to remain with it in isolation for some time. The disease may have spread to her in this way.

The state of the patients, at the onset of the disease, as to vaccination was as follows:—

1.	M.	31	July 28	Vaccinated.
2.	F.	64	Aug. 14	"
3.	F.	40	Aug. 20	"
4.	M.	30	Sept. 2	"
5.	M.	1½	Sept. 4	Not Vaccinated.
6.	F.	4	Sept. 7	"
7.	F.	11½	Sept. 10	Vaccinated.
8.	F.	15	Sept. 1	"
9.	M.	5	Sept. 21	Not Vaccinated.
10.	M.	4	Sept. 21	"
11.	M.	35	Sept. 24	Vaccinated.
12.	F.	32	Sept. 24	"
13.	M.	22	Sept. 28	"
14.	F.	42	Oct. 13	"
15.	M.	37	Oct. 24	"

Of the above none had been recently vaccinated, and one only re-vaccinated since infancy, and that some years since.

Nos. 9 and 10 when discovered were vaccinated at once, but too late, being but four days before the onset of the rash. Four of the fifteen patients were unvaccinated, and these four were the only young children attacked. The two girls aged 11½ and 15 respectively, who had been vaccinated in infancy, had the disease so mildly that one was not in bed

at all and the other but a day or two, and neither had any marks or trace of the eruption within three weeks from its onset. The only patient badly marked is the little unvaccinated girl, aged 4.

The first two cases died and were said to have been vaccinated in infancy, *i.e.*, 31 and 64 years previously, respectively. The first of these had been a confirmed drunkard; this case was hopeless from the first. The second of these was an old woman of 64 who died within a few days of the onset.

Most of the remaining inmates in each house affected were vaccinated or re-vaccinated.

None of those inmates of infected houses who were vaccinated or re-vaccinated developed the disease, except those re-vaccinated too late, *viz.*, Nos. 9 and 10, who were 8 or 9 days on with the disease before they could be vaccinated.

On the other hand Nos. 2 and 14 were among those few who refused to accept the safeguard of re-vaccination.

The means taken to prevent the spread of the disease were extremely thorough.

Disinfection by steam and perchloride of mercury were the principal means used in conjunction with washing, lime-washing, re-papering and painting. The absence of return cases of such a serious disease has been sufficient justification for such thoroughness.

In the case of the first outbreak the disease was confined to the house in which it originated.

In the second outbreak there were 5 other cases beside those in the house in which the disease originated, and this number is a very small one considering the fact the disease was not notified for over three weeks in cases 3 to 6 inclusive, and therefore no means were taken during that time to check the spread of the disease.

In each of the houses affected, six in number, the patients were at once removed to hospital, the other inmates were safely isolated and quarantined, and the houses thoroughly disinfected and re-papered, re-decorated, &c. What could not be disinfected was destroyed. The quarantine was very useful, as Nos. 2, 9, 10, 11, 12 (and No. 14 also probably) had "taken" the disease before admission to quarantine, and developed the disease within 13, 4, 4, 8, 8, and 12 days respectively.

Unfortunately there was no room in which Nos. 11 and 12 could be kept for more than a day or two while their home was being attended to. (The isolation cottage had not then been opened, and these could no longer be accommodated at the Sanatorium). No. 14 would not stay the full quarantine time and so these three had to return, otherwise there were no return cases.

Two admirable results came of the outbreak :—

1. A Small-pox Hospital was erected in a capital situation, and the great danger of treating such cases at the Sanatorium was ended.
2. The Isolation Cottage was established and put into working order. This cottage is intended, under the Infectious Diseases Prevention Act, 1891, for the accommodation of people during the disinfection of their houses. It will have another use, namely, as a sort of quarantine station where persons may stay, if they are willing, until the incubation period of the particular disease to which they have been exposed is well over, every person having been thoroughly disinfected before admission to the cottage. This was done in the cases of friends of the patients with Variola, whose houses were then turned out and disinfected in a way impossible had the inhabitants remained. Up to the end of 1895, from October 1st, when it was opened, 33 persons had been so isolated.

DIPHTHERIA.

Thirty-six notifications of cases of this disease were received, as compared with 40, 58, 59, 184, and 495 in the five preceding years respectively, from 1894 to 1890 inclusive. The distribution of the 36 cases according to Wards has been shewn in a preceding table.

The fatality was 5 out of 36 cases notified, as against 6 out of 40 in 1894. Including Membranous Croup there were 6 deaths.

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

Bacteriological examination as an additional means of identification of true Diphtheria is being more and more adopted throughout the country, and assists not merely in diagnosis but also in deciding when a patient is really no longer a source of infection for others. It might be with advantage adopted in Eastbourne.

The steady decrease of Diphtheria in Eastbourne is gratifying, since Diphtheria is not decreasing elsewhere in the same way as such diseases as Enteric Fever and Phthisis are, but is rather on the increase, especially in large centres of population.

Towards the end of June, 1895, I made an analysis of the cases of Diphtheria which had been notified in Eastbourne since the adoption of the Notification Act, and examined the circumstances under which they had occurred, with a view to ascertaining if possible the probable causes of Diphtheria in Eastbourne special to any part of the Borough or to the Borough itself. The number of cases, as I have shewn, has been steadily diminishing year by year until now a serious case of Diphtheria is a rarity. The material for my investigation was derived mostly, therefore, from what records there were of the 1889-90 epidemic. Appended is a summary of the results I obtained by studying the 827 cases which had been notified.

The age incidence and the sex incidence presented nothing notable ; female cases preponderated as usual, and the ages of incidence were chiefly those from 3-15 inclusive. The 827 cases occurred in 584 different houses, giving an average of 1.4 cases to each house affected. After 1892 more care had been taken in the isolation of cases and in the disinfection, and since then the average number of cases per house affected has been reduced to 1.1. There were also, it must be remembered, no more epidemic cases after 1892. As regarded the effect of school intercourse in the spread of these 827 cases of Diphtheria, what evidence there was, was negative ; where records of the schools attended had been kept, it was found that no sets of cases came from any one school, but the cases occurred in children attending any and all of the elementary schools. This, however, did not remove the possibility that the grouping together of the children in the schoolrooms for some hours daily, may have made them more susceptible to diphtheritic infection.

Enquiry into the connection of the cases with personal infection, seasons, water, and milk supplies led to no special results.

The question of the connection of the occurrence of Diphtheria with the *sanitary condition of the houses* in which the cases were found is a most interesting one, and, while some years ago the tendency to put down almost every case of Diphtheria as due to defective drains and other insanitary conditions in houses was overdone, I am inclined to think that in the present day opinions have gone too far the other way ; and although (seeing that we know the specific nature of Diphtheria) it is merely a truism to say that sanitary defects cannot cause Diphtheria, an insanitary house is certainly a strong predisposing cause of Diphtheria, and continued inhalation of sewer air and other noxious gases in an insanitary house distinctly increases one's chance of suffering from Diphtheria, if the specific poison happens to be about.

Records of the condition of the houses affected have been kept since April, 1892. Since that date 116 cases have occurred in 101 separate houses.

Of these 101 houses the sanitary condition in each of 36 was reported "good," in 35 houses the condition was "fair" or "indifferent," and in 29 the condition was "bad" and "unsatisfactory," the condition of the one remaining house being unspecified.

Thus only 36 per cent. of the houses in which cases occurred were in a satisfactory sanitary condition, while 29 per cent. were distinctly bad.

I need hardly say that in Eastbourne—very much of it new, and built according to Building Bye-laws—this percentage of insanitary houses is very much out of proportion.

These figures I think help to prove that insanitary houses have causal connection with cases of diphtheria.

The defective sanitary conditions alluded to here comprise such as unsound drains, defective and filthy water-closets, unsound and unventilated soil pipes, foul refuse heaps, waste pipes connected direct to the drains, defective traps, &c.

I may add that the records as to the sanitary condition of the respective houses were made by the Inspectors at the time of the occurrence of the cases, and steps were taken to have the defects remedied.

Unfortunately, a small part of the Borough of Eastbourne is at a low level and is subject to periodical *flooding*. The conjunction of a high tide (which dams back the sewage in the sewers) and heavy rain causes the sewers to overflow from the openings in them, and to flood these low-lying houses of the Borough. When the water sinks, evil-smelling mud is sometimes left behind. The Works arranged by Mr. Henry Law, C.E., have been commenced to remedy this.

It is generally accepted that dampness of soil is a factor to be reckoned with in the causation of diphtheria. Dr. Monckton-Copeman, in Stephenson and Murphy's Hygiene, says, however, that many districts which, although usually dry, are liable to occasional floods, are remarkably free from the disease (meaning diphtheria); so that it appears that a persistent impregnation of the soil with moisture is of more importance than fluctuations in the height of the ground water, particularly if these have any considerable range. From the results to be specified later on, this seems to be the case in connection with the periodical flooding of some of the houses in Eastbourne.

This flooding in its severest form is rare from the rarity of the coincidence of very heavy rain and high tide.

At the very outside, rather less than 1,655 houses in the borough, mostly situated in the ground known as the "Marshes," are subject to flooding, as above. Of these 1,655 houses there were cases of diphtheria in 246, the total number of cases being 353—*i.e.*, 14·8 per cent. of the houses subject to flooding had in them cases of diphtheria, as compared with 11 per cent. of the houses in the borough as a whole, and with 13 per cent. of the whole of the houses (flooded and non-flooded) similar in character and on similar soil to those flooded.

The cases averaged 1·4 to a house, or the same average as that for all the houses on that class (*viz.*, "alluvium") of soil. Taking the houses on "alluvium" alone, 15 per cent. of these houses subject to flooding contained one or more cases of diphtheria, against 13 per cent. of the houses (subject or not subject to flooding) on the alluvium as a whole. There is thus a distinct but small increase in the case of flooded houses.

Apart from figures, the Sanitary Inspectors who have been on duty during the whole period I have mentioned, tell me that they always expect a case or two after a flooding, and are rarely disappointed.

On the whole, flooding does not seem to have had any great effect in spreading diphtheria.

The possible relation of the different *varieties of soil* to the predisposing causation of diphtheria seemed worth studying, and the geological condition of the Borough is favourable to an investigation of this kind.

The larger portion of the Borough is on firm hard chalk, a small portion on the upper greensand, another portion on alluvial soil, a fourth on shingle, known locally as "beach," this beach or shingle being composed of rounded flint stones for a very great depth.

The alluvium is covered with loose chalk, put on to raise the level for building and other purposes.

The chalk and greensand are dry, the alluvium much less so, except that it is covered by loose chalk for some feet in depth in some places.

The beach or shingle is soaked with sea-water at every high tide—twice in each twenty-four hours.

The houses in Eastbourne for the purposes of this investigation were taken at 5,300 in number, as they amounted to about this number half-way through the years in which the 827 cases occurred. I find that they may be roughly classified as follows :—

On chalk and the small portion of			
greensand...	...	...	...
On alluvium	...	...	...
On the beach	...	...	...
			5,300 100'0
			3,281 <i>i.e.</i> 61'9 per cent.
			1,340 <i>i.e.</i> 25'3 „
			679 <i>i.e.</i> 12'8 „

The houses in which Diphtheria occurred were situated as follows :—

On the chalk and greensand	...	...	257 <i>i.e.</i> 44 per cent.
On the alluvium	...	...	172 <i>i.e.</i> 29'5 „
On the shingle or beach	...	...	155 <i>i.e.</i> 26'5 „

The cases occurred in the houses as follows :—

On chalk and greensand 343 *i.e.* 1·3 to each house affected.

On alluvium 248 *i.e.* 1·4 „ „

On the beach 236 *i.e.* 1·5 „ „

Or calculating the percentages in another way—of the total houses on the chalk, 257 out of 3,281 had cases in them, being 7·2 per cent., with 1·3 cases to each house; on the alluvium, 172 houses out of 1,340 had cases in them, being 13·0 per cent. with 1·4 cases to each house; on the beach, 155 out of 679, being 23 per cent. with 1·5 cases. Eleven per cent. of the total houses of the Borough had cases in them, with 1·4 cases per house. The following table shows this more clearly :—

Houses on.	Percentage on each soil of total houses.	Percentage on each soil of total affected houses.	Percentage of total houses on each soil in which cases occurred.*	No. of cases per house.
Chalk and the small portion of greensand	61·9	44·0	7·2	1·3
Alluvium	25·3	29·5	13·0	1·4
Shingle... ..	12·8	26·5	23·0	1·5
In the whole Borough...	100	100	111·0	1·4

* NB.—This column shews the real relation, whether causal or accidental, of the soils to the occurrence of Diphtheria.

For general dampness of soil, at first sight it would seem that the alluvium is most unsatisfactory, but in the case of Eastbourne the shingle is worse, being constantly soaked with sea-water.

The numbers show that Diphtheria is more prevalent in houses on the alluvium and on the shingle than in those on the chalk, but more especially in those on the shingle.

Unfortunately, as in statistics always, other things are not equal, and it has to be borne in mind in studying these figures that the class of houses on the alluvium and on the

shingle is inferior to that of those on the chalk, both as to the sanitary condition as a rule, and as to the class of people inhabiting the houses. The houses on the alluvium and those on the shingle, however, are so nearly similar that they can be fairly compared one with another, and these figures apparently show that the constantly damp (with sea-water) shingle is far worse as a soil for building on as regards Diphtheria, than the occasionally flooded low-lying marsh ground.

This seems to me more than a "coincidence," and is a result I was not expecting on commencing the investigation.

In some parts, at very high spring-tide the sea-water is within two or three feet of the basements of the houses built on the shingle.

These figures show up the houses on the shingle as regards Diphtheria so badly, that I have carefully compared the conditions prevalent, and find that for poverty, &c., they are not very dissimilar to those obtaining in the houses on the alluvium; the houses are small, they include many of the poorest and dirtiest people, but the most striking difference is that they are built on such a widely different soil.

SCARLET FEVER.

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

On the re-assembling of a School in St. Mary's Ward in January, 1895, a case of Scarlet Fever was imported into Eastbourne and was the origin of 20 cases, all but three of which were confined to the School itself. The mischief was done before the originating case could be discovered. Except for this instance, the cases were all more or less isolated, and no "return" cases occurred, *i.e.*, no cases occurred in houses to which patients had returned from the Hospital.

The fatality was one patient of fifty-nine, and this one patient was admitted to the Sanatorium almost moribund and suffering from other diseases coincidently with Scarlet Fever.

The fifty-nine cases occurred in 33 houses.

The cases were distributed in the Wards as shewn in one of the preceding tables, and apart from the above-mentioned School outbreak, St. Mary's Ward, in which the Sanatorium is situated, was very free indeed from Scarlet Fever.

ENTERIC FEVER.

Eighteen cases of this disease were notified as compared with 15 in 1894 and 16 in 1893. The yearly average since notification has been adopted has been about 15·5.

As far as could be ascertained by investigation made when each case was notified, six of these cases were imported into the Borough from elsewhere, viz., two from West Africa and one each from New York, Woking, North of France, and London.

The fatality, viz., two cases (both imported) out of 18, was below the average. One of the patients died at the Sanatorium. The disease in her case was imported from France, in the case of the other, from West Africa.

The 18 cases were found in 16 different houses in different parts of the Borough, as follows :—East Ward, 5 ; Central, 5 ; West, 2 ; St. Mary's, 4.

The sanitary condition of the houses in which Enteric Fever cases occurred in Eastbourne has been shown in a previous table. Apart from the houses in which the imported cases were found, five of the nine houses were sanitarily defective.

As regards Enteric Fever, much has been done towards improvements in house sanitation and drainage, and measures have been taken in the affected houses where

necessary ; the number of cases of Enteric Fever, however, should be still farther reduced, although the meteorological conditions were rather favourable to Enteric Fever in 1895, hence probably the slight increase of cases.

At the Sanatorium the infectious dejecta are destroyed in a Cremator, elsewhere they have to pass into the sewers which is objectionable, especially as the levels in the East of the town do not allow of much fall in the sewers. This is an additional reason for admitting patients with Enteric Fever to the Infectious Diseases Hospital rather than leaving them at home or in a general hospital.

ERYSIPELAS.

Twenty cases were notified, two being in the Princess Alice Hospital. One of the twenty cases ended fatally.

PUERPERAL FEVER.

Three cases were notified, and one of them was removed to the Sanatorium.

MEMBRANOUS CROUP.

The one case notified of this disease was too ill for removal to the Sanatorium. The case ended fatally. In the death list will be seen two deaths from this disease ; one, however, was notified as Diphtheria.

The non-notifiable infectious diseases are referred to when reporting the deaths from those diseases.

Disinfection.

As regards the rooms and houses infected, in nearly every case disinfection has been carried out by the Sanitary Inspectors. It should, in fact, never be done by anyone else, for though the directions of the medical attendant are as a rule 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. This actually happened in one case where the offer of accommodation at the Sanatorium was refused.

Disinfection of rooms, &c., has been carried out by repapering, limewashing, painting, and thorough washing with disinfectants. No reliance is placed on sulphur fumigation. Perchloride of mercury spray has been used to some extent.

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., for disinfection after any infectious disease, even after so comparatively light a disease as "Ringworm," has been encouraged. Clothes and other articles from patients who have suffered from Tinea, Measles, and Whooping Cough have been disinfected at the Sanatorium during 1895 when such disinfection has been applied for.

The question of providing temporary accommodation for the relatives of patients of the poorer classes displaced during disinfection of their rooms is important, and has in 1895 received the satisfactory attention of the Sanitary Committee.

The Isolation Cottage has now been in use since October 1st, with a capable Inspector in charge. As mentioned while writing of Variola above, without this very necessary Isolation Cottage it is difficult to see how farther spread of Variola could have been prevented.

DEATHS.

The deaths recorded during 1895 were 521 in number, and were distributed amongst the various classes of disease as follows. Deaths during 1894 are given similarly arranged for comparison :—

Class.	Disease.	No of Deaths.		Percentage of Total Deaths.	
		1894	1895	1894	1895
Class I ...	Zymotic Diseases ...	33	101	7·67	19·4
„ II ...	Parasitic Diseases...	0	0	0·00	0·0
„ III ...	Dietic Diseases ...	2	1	0·47	0·2
„ IV ...	Constitutional Diseases..	113	127	26·28	24·4
„ V ...	Developmental Diseases.	63	66	14·65	12·6
„ VI ...	Local Diseases ...	195	202	45·35	38·8
„ VII...	Deaths from violence ...	11	11	2·56	2·1
„ VIII	Deaths from ill-defined and not specified causes	13	13	3·02	2·5
Total ...		430	521	100·00	100·0

The total death-rate for the Borough for 1895, inclusive of every death that took place was **12·40** per 1000 per annum. Excluding the deaths of non-residents of Eastbourne, which numbered 69, the rate was **10·71** per 1000 per annum.

This death-rate is higher than the rate in 1887, when it was 12·18, and higher than that in 1894 when the extraordinary low rate of 10·49 was recorded. Except for the rates in these two years, that of 1895 is the lowest for many

years. 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, excluding deaths of visitors.	Death-rate of England and Wales.
1885	386	14.59	14.03	19.2
1886	443	15.95	14.66	19.5
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	12.51	20.2
1892	505	13.58	11.67	19.0
1893	576	14.76	12.79	19.2
1894	430	10.49	9.59	16.6
10 years average }	448	13.58	12.34	18.8
1895	521	12.40	10.71	18.7

In every important class the deaths were in number equal to or above the deaths of 1894, but the greatest increase was in Class I. or Zymotic Diseases. This is not satisfactory, especially at first sight, but the large increase is due to the epidemic of Influenza early in the year and to a number of deaths from Diarrhoea. The former disease caused 33 deaths, the latter 36, leaving 32 from other Zymotic diseases.

Excluding the deaths in the various institutions (which are situated principally in St. Mary's Ward) the deaths

were distributed over the various Wards of the Borough as follows :—

Wards.	Number of Deaths 1895.	Death-rates per 1,000.			
		1895.	1894.	1893.	1892.
East... ..	181	12·24	10·6	17·01	13·35
Central	131	11·26	10·3	9·54	11·28
West	42	6·03	4·5	} 15·82*	10·35
St. Mary's ...	87	9·95	6·9		
Institutions ...	80	...	...	...	...

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

Eighty deaths occurred in Institutions as follows :—

Institutions.	Ward.	Number of Deaths.
Workhouse	St. Mary's... ..	43
Princess Alice Hospital.	St. Mary's... ..	26
Borough Sanatorium ...	St. Mary's... ..	6
All Saints' Hospital ...	West	5

The deaths in Institutions include deaths of non-residents and of indoor paupers from outlying parishes of the Union, the remainder from the Borough itself, are mainly from the East Ward, and next to this from St. Mary's.

The death-rates for the East and Central Wards, though not excessive, are less satisfactory than the rates in the other Wards. This was the same in 1894, and has been usually so as regards the East Ward. The death-rate in Eastbourne (as elsewhere) is largest in the districts of greatest density and in the poorer districts. The diseases in excess in the East Ward, compared with the other Wards,

were especially Influenza, Diarrhœa, Phthisis, "Convulsions," Bronchitis, Diseases of the Liver, and Inanition or Debility.

The 521 deaths include those of 249 males and 272 females. The death-rate of males for 1895 was 14·5, that of females 10·9, the death-rate of females being, as usual, less than that of males. Males especially exceeded females in deaths from Phthisis, Premature Birth, Pneumonia, Inanition, and Violence. The excess of female mortality was more especially from Influenza, Whooping Cough, Diphtheria, Cancer, Old Age, "Convulsions," and Diseases of the Stomach.

Ages at Death.

The death-rates of the various age-groups are very important in instituting comparisons with death-rates of other districts, and more so than the total death-rate. The age-group death-rates are therefore given in the following table :—

Ages.	Deaths in 1895.	Death-rates per 1,000, Eastbourne.			
		1895.	1894.	1893.	1892.
Under 1	122	139·1	110·98	159·5	196·9
1—5	49	14·7	7·38	32·6	9·5
Total under 5 ...	171	40·7	28·96	59·03	48·6
5—15	9	1·0	1·49	4·1	2·15
15—25	29	3·0	2·02	2·4	3·99
25—65	159	9·0	8·08	9·6	9·56
Over 65	153	85·8	75·25	78·8	79·31

Reference to this table shews that the over 65 age-group suffered most in 1895, compared with other years, and this

was very much owing to the severe winter with the 31 days of continuous frost in January and February.

As compared with 1894 every age-group death-rate was higher in 1895, except in the group 5-15.

The preponderance of females in Eastbourne makes it advisable to ascertain separately the death-rates of the different age-groups for each sex. The following table shows the rates for 1895 :—

Males.				Females.		
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.
Under 1	403	70	173·7	474	52	109·7
1—5	1585	24	15·1	1739	25	14·3
Total under 5...	1988	94	47·2	2213	77	34·7
5—15... ..	4362	4	0·9	4507	5	1·1
15—25... ..	3334	9	2·6	6313	20	3·1
25—65... ..	6772	82	12·1	10728	77	7·2
65 and over...	709	59	83·2	1074	94	87·5

The deaths during 1895 occurred in months as follows :—

First Quarter	174	{ January	36
		{ February	64
		{ March	74
Second Quarter	104	{ April	36
		{ May	40
		{ June	28

Third Quarter	133	{ July 29 August 55 September 49
Fourth Quarter	110	{ October 38 November 32 December 40

The following is an interesting table of comparisons:—

Annual Rate of Mortality per 1,000 for each quarter of 1895.

Districts.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Year.
Eastbourne	16·57	9·90	12·66	10·47	12·40
England & Wales ... { Town Districts }	23·4	17·4	18·9	18·5	19·5
{ Country Districts }	21·5	16·9	14·4	15·5	17·0

Infantile Mortality.

The total number of deaths of infants, that is of children of ages under one year, was 122, males 70, females 52. Infantile mortality is calculated on the number of births registered, and for 1895, therefore, it was 133 per 1000 births. This is an average 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 146 per 1000 births. The infant mortality of Eastbourne in previous years is shown in the table below, which also shows how much above the average for Eastbourne the 1895 rate is.

Year.	Deaths under 1 year.	Mortality per 1000 births.
1895	122	133
1894	95	97
1893	130	144
1892	153	166
Average of ten years up to 1893	106.6	125

The infantile mortality for England and Wales for 1895 was 161 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
From Zymotic diseases	35	56	9	38
Constitutional diseases	15	9	14	13
Developmental diseases	36	19	22	26
Local diseases	53	27	38	34
Deaths from violence	5	1	—	2
Deaths from ill-defined and not specified causes	9	18	12	9

Deaths of Infants (under 1 year).				
Disease.	1892	1893	1894	1895
Measles... ..	1	10	—	2
Whooping Cough	3	13	1	5
Diarrhoea	30	30	7	30
Other Zymotic diseases ...	1	3	1	1

The deaths from Diarrhœa were 30 each in 1892, 1893 and 1895. In 1894, which was a wet and unseasonable summer, the deaths from this disease were but seven in number.

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	14776	60
Central	11624	33
West	6962	7
St. Mary's	8638	22
	42,000	122

In connection with the subject of infantile mortality and mortality of children it is due to the National Society for the Prevention of Cruelty to Children to point out that this district, in common with the country generally, owes much to the Society's assistance. The amount and value of the work of the Society is not, as is sometimes thought, summed up in the exposure of, and punishment for, the cases of cruelty brought before the courts from time to time. Its best work is the preventive effect exercised by the existence of the Society and its Inspectors, and by their warnings.

Senile Mortality.

Of the 521 deaths which occurred in 1895 there were 153 of persons over 65 years of age.

Between 65 and 75 years of age	73	Males 28	Females 45
Between 75 and 85 years of age	70	„ 28	„ 42
Over 85 years of age	10	„ 3	„ 7

Zymotic Diseases.

This important class includes not only the "seven principal zymotic diseases" of the Registrar-General, but also all diseases of a Miasmatic, Diarrhœal, Malarial, Zoogenous, Venereal or Septic nature.

In this class there were 101 deaths. From the "seven principal zymotic diseases" there were 65 deaths, inclusive of 36 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 1895, *i.e.*, the death-rate from the seven principal Zymotic diseases, was 1.54 per 1000 (England and Wales for 1895 2.14 per 1000), the total Zymotic rate being 2.44 per 1000 per annum.

The 101 Zymotic deaths resulted from the following diseases:—

Disease.	Total.	Males.	Females.
Influenza	33	9	24
Scarlet Fever	1	1	—
Whooping Cough	14	4	10
Diphtheria	4	—	4
Membranous Croup.. ...	2	1	1
Enteric Fever	2	—	2
Diarrhœa	36	17	19
Syphilis	1	—	1
Septicæmia	1	1	—
Erysipelas	1	1	—
Small-pox... ..	2	1	1
Measles	4	1	3
Totals	101	36	65

Total Zymotic deaths and death-rates since 1885.

Year.	Total Zymotic deaths, Eastbourne.	Zymotic death-rate per 1000, Eastbourne
1885	58	2·19
1886	83	2·98
1887	64	2·19
1888	47	1·53
1889	90	2·80
1890	112 (a)	3·32
1891	68	1·92
1892	54	1·46
1893	145 (b)	3·71
1894	33	0·80
1895	101 (c)	2·44

(a) Diphtheria prevalent.

(b) Measles, Diarrhoea, Whooping Cough, and Scarlet Fever prevalent.

(c) Influenza and Diarrhoea prevalent.

The Zymotic deaths were distributed as follows :—

Ward.	Number of Deaths.	Zymotic Death-rate.
East	42	2·8
Central	24	2·0
West	11	1·5
St. Mary's	24	2·7

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

VARIOLA.

The deaths from this disease have been sufficiently alluded to earlier in the Report.

MEASLES.

This disease caused four deaths in 1895. Early in the year there was a small epidemic. The numbers of deaths in 1894 and 1893 were 0 and 55 respectively.

The average number of deaths in recent years has been 9.2.

Notification of this disease has been tried in many places; I do not at present advise that it should be added to the list of notifiable diseases.

SCARLET FEVER.

The one death was in a very acute case from the East Ward, the patient suffering at the same time from Chorea. Fortunately the school outbreak led to no deaths. Excluding the seven deaths in 1893 the yearly average of deaths from Scarlatina has been 1.

WHOOPIING COUGH.

This disease was somewhat extensively spread throughout the Borough and caused 14 deaths, which is rather over the average number.

INFLUENZA.

A very extensive epidemic of Influenza occurred in the first quarter of the year and caused 33 deaths. No doubt also some of the deaths ascribed to other diseases, especially respiratory, were indirectly due to Influenza. The difficulties in dealing with the spread of this disease are very many, but isolation and disinfection should always be attempted.

DIPHTHERIA.

There were four deaths from this disease, all occurring in females. No doubt the deaths from Membranous Croup should be included under this heading, making six deaths.

ENTERIC FEVER.

This disease caused 2 deaths, which is under the average and is the more satisfactory from the fact that the meteorological conditions rather led one to expect more Enteric Fever than usual in 1895. The deaths in 1894 were 4, and in 1893, 3. Both of the fatal cases were imported, one from France and one from West Africa.

DIARRHŒA.

The number of deaths, viz., 36, was over the average ; 30 occurred in children under one year old. The meteorological conditions of 1895 were favourable to the disease, while the unseasonable summer of 1894 saved many infants lives. The deaths occurred in the Wards as follows:—East 18, Central 10, West 3, St. Mary's 5. As usual, the Ward whose population was poorest had most cases in proportion to its population.

The connection between improper feeding of infants and Infantile Diarrhœa is so intimate that a leaflet on the "Feeding of Infants" was issued in 1895.

The deaths occurred mainly in the hot months from July 20th to October 5th.

Fuller details of the cases are given in the Appendix tables. Of Zymotic diseases throughout England and Wales in 1895 Diarrhœa caused most deaths, then came Measles and Whooping Cough far ahead of the other diseases. Too little is thought of Measles and Whooping Cough by parents; they are, with Diarrhœa, by far the worst Zymotic diseases as regards numbers of deaths. Over 51 times as many died in 1895 from Measles as from Small-pox, for instance, and Whooping Cough was not far behind.

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 (the deaths from which are detailed in the tables in the appendix) I have to mention specially three main classes, viz., the various forms of Rheumatism, of Cancer, and of Tuberculosis.

RHEUMATISM.

The absence of many deaths from Rheumatism in Eastbourne is noticeable. The two deaths that were registered were both of adults. That deaths from Rheumatism are not referred to the Acute Endocarditis class is evident, as there was but one death registered from that disease.

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.

The annual number of deaths from Cancer throughout England and Wales, up to and including 1892, reached its highest point in 1891, and was but slightly lower in 1892, when the deaths numbered 93,420, equal to 3·16 per 1000 of the population.

In Eastbourne in 1895 there were 37 deaths from Cancer, as against 36 in 1894, 25 in 1893, and 27 in 1892.

The 37 deaths of 1895 included 14 of males and 23 of females, and the rate per 1000 was ·88. Local numbers are too small to afford any adequate basis for comment, but this rate per 1000 is certainly comparatively small.

PHTHISIS.

During 1895 the number of deaths from Phthisis registered was 51, including 29 males and 22 females. The death-rate for the year from this disease was 1·2 per 1000, the rate for females being less than that for males as usual throughout the country.

Eleven of the deaths from Phthisis occurred among non-residents. This reduces the Phthisis death-rate of the inhabitants to 0·9 per 1000.

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

Sanitation has an important bearing on the occurrence of Phthisis and allied diseases. Among the most important measures in the power of Sanitary Authorities for its prevention are :—

- i. House Sanitation.
- ii. Proper Drainage of the Soil.
- iii. Prevention of Overcrowding and similar Nuisances, in houses and workshops.
- iv. Supervision of Milk.
- v. Inspection of Cowsheds, Dairies, &c.
- vi. Proper Supervision and Slaughtering of Animals whose flesh is intended for human food.
- vii. Means such as disinfection of existing cases and infected clothes, rooms, &c.

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

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

In 1895 the Report was issued of the Royal Commission appointed to inquire into "The effect of food derived from tuberculous animals on human health." The report is a most important one as it with authority indicates what was already widely becoming known, viz., that a considerable amount of the phthisical or tuberculous diseases so prevalent in the present day is in all probability due to infection by food derived from diseased cattle. The following are some important extracts:—

"We have obtained ample evidence that food from tuberculous animals can produce tuberculosis in healthy animals."

"The actual amount of tuberculous disease among certain classes of food-animals is so large as to afford to man frequent occasions for contracting tuberculous disease through his food."

"Tuberculous disease is observed most frequently in cattle and swine. It is found with much greater frequency in cows kept in town cow-houses."

"There is reason to believe that tuberculous matter when present in meat sold to the public is more commonly due to contamination of the surface of the meat with material derived from other diseased parts (*e.g.*, the lungs, &c.) than to disease of the meat itself."

"The same matter is found in the milk of cows when the udder has become invaded by tuberculous disease."

"Tuberculous matter in milk is exceptionally active in its operation upon animals fed either with the milk or with dairy produce derived from it. No doubt the largest part of the tuberculosis which man obtains through his food is by means of milk containing tuberculous matter."

The importance of adequate supervision of the slaughtering of cattle for food in proper abattoirs is shewn by the following extract from the same source:—

"Provided every part that is the seat of tuberculous matter be avoided and destroyed, and provided care be taken

to save from contamination by such matter the actual meat substance of a tuberculous animal, a great deal of meat from animals affected by tuberculosis may be eaten without risk to the consumer."

The important report that I have quoted in this way thoroughly confirms the statement that the spread of Phthisis, Tuberculous disease or "Consumption" as it is popularly called, might be checked to an appreciable degree by careful and cleanly slaughtering under adequate supervision, by rejecting absolutely the most tuberculous animals at least, by adequate cooking of all meat, and by boiling of milk before use.

The importance of the effect and non-effect of cooking cannot be too widely known, and I, therefore, quote two farther paragraphs from the Royal Commission Report.

1. AS TO MEAT.—

"In the boiling and roasting experiments, as ordinarily carried out in the kitchen, the temperature, however high it may be near the surface, seldom reaches 60 degrees C. (140 degrees F.) in the centre of a joint, except in the case of joints under 6lbs. in weight. Ordinary cooking is quite sufficient to destroy any smeared material that remains on the outer surface of the meat, but it cannot be relied upon in the slightest degree to render innocuous the same smeared material when in the centre of a roll. Ordinary cooking, such as boiling, and more especially roasting, though quite sufficient to sterilize the surface, and even the substance for a short distance from the surface of a joint, cannot be relied upon to sterilize tubercular material included in the centre of rolls of meat, especially when these are more than 3lbs. or 4lbs. in weight. The least reliable method of cooking for this purpose is roasting before the fire; next comes roasting in an oven, and then boiling."

2. AS TO MILK.—

“The most deadly tubercular material can be rendered absolutely innocuous, so far as any spreading of infective disease is concerned, by the action of the temperature at which water boils. We have evidence that a lower temperature than this is sufficient to bring about the same results when allowed to act for a longer time, but for the present it is sufficient to state that boiling for an instant even renders the tubercle bacillus absolutely innocuous.”

It must be borne in mind that tubercular diseases include not only Phthisis (Consumption of the Lungs), but also Tubercular Meningitis (one of the forms of Brain Fever and Convulsions); Tubercular Enteritis and Peritonitis (Consumption of the Bowels in children, and Persistent Diarrhœa in adults with wasting); Diseases of the bones and joints; Abscesses in the neck due to diseased glands; Lupus, a wasting disease especially of the face; Disease of the spine leading to Curvature, Abscess and Hump-back, and various other evils. It is certain that such diseases as these are to be classed among those that can be partially prevented by thorough sanitation, including, of course, supervision of slaughtering of animals for food, and attention to milk supplies.

Developmental Diseases.

Premature birth caused the death of thirteen males and seven females, a total of 20 as compared with 18, 15, and 35, in the three previous years respectively. All but two occurred in the East and Central Wards, the better class West Ward having no such deaths. Poverty is one of the predisposing causes of premature births.

Congenital malformations caused 6 deaths, also all in the East and Central Wards.

Forty deaths were ascribed to “Old Age,” which is the same number as in 1894.

Local Diseases.

Diseases of the Nervous System caused 45 deaths, as compared with 48 in 1893 and 44 in 1894; the majority of these were from "Apoplexy." "Convulsions" caused 16 deaths in infants, 5 being of males. "Convulsions" is a vague term, and refers to a symptom rather than to a disease. Cases of "Convulsions" occur, however, which can with difficulty be ascribed to any particular disease.

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

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

Arranged according to the quarters of the year, the deaths in 1895 from these diseases occurred as follows:—

First Quarter, 20.

Third Quarter, 3.

Second Quarter, 20.

Fourth Quarter, 16.

Many of the diseases set down to Influenza in the first Quarter were complicated by Respiratory Diseases.

Bronchitis was the chief cause of death in this group, and accounted for 35 deaths. As usual, young and old persons suffered mostly, only 4 of the deaths being of persons between 5 and 55 years of age.

Deaths from Violence.

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

There were four suicides, one each from poison, hanging, drowning, and cutting throat. In 1894 there was one suicide, and in 1893 seven.

The deaths from violence were in the proportion of 0·26 per 1000 of the population (0·64 per 1000 for England and Wales in 1895.)

The ages ranged from under one to over 55.

Uncertified Deaths.

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

The percentage of uncertified deaths was 0·5 (for England and Wales in 1895 2·3 per cent.).

Inquests.

Seventeen inquests were held, *i.e.*, on 3·2 per cent. of the deaths (England and Wales in 1895, 6·0 per cent.).

The Verdicts were as follows:—Natural Causes, 6; Accidental Deaths, 4; Misadventure, 1; Alcohol Poisoning, 1; Syphilis, 1; Suicides, 4.

The deaths were of 9 men, 3 women, and 5 children.



SANITARY WORK, 1895.

To reduce to figures the work of the department during 1895 is impossible. As far as possible, tables are given showing some of the work done by the Inspectors.

SANITARY CERTIFICATES.

The demand for these certificates of up-to-date sanitation still continues, and visitors to the Borough have learned to look out for the protection they afford. Eighty-one new certificates were issued in 1895, and of these only eleven apply to newly-built houses, so that no fewer than 70 houses were old ones brought up to date in sanitation, in addition to the large number where ordinary defects were remedied. It is fair to assume that in many of these instances had it not been for the desire of obtaining the certificate, the house sanitation would have been carried out to just the pitch where the Inspectors could no longer swear to the existence of an actual nuisance. In a health resort house sanitation should be up-to-date, and visitors appreciate the advantages of living in an up-to-date house. In 1894, 1893 and 1892, 108, 149 and 100 certificates respectively were issued.

Other towns are adopting the idea, and a Bill has been drafted with the object of making sanitary certificates compulsory.

SEWERAGE.

The supervision of the relaying and repairing of house drainage has taken very much of the Inspectors' time. There is a danger of builders using the Inspectors too much as Clerks of their Works, but careful watching throughout is unfortunately very necessary, especially as, in case of bad work discovered later, blame falls on the Inspectors for not detecting it at the time. The large scheme of improvement of part of the sewerage system to prevent the occasional flooding of some low-lying areas is in hand.

REFUSE REMOVAL.

Comparatively very complaints of non-removal have been received by the department. Offensive dust-holes are disappearing, and the use of the moveable, iron, covered dustbin is more and more general. From a sanitary point of view some of the carts might be improved.

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.

After many meetings and much discussion on the subject, it was decided that provided certain amendments in each case were carried out, licenses should be granted to each slaughter-house except that in Bourne Street.

Ocklynge slaughter-house has been amended and a license was issued. The situation is not satisfactory.

Upwick Slaughter-house had not at the end of the year been satisfactorily amended, but works are in hand.

Bourne Street Slaughter-house is objectionable in almost every way, and steps are being taken to attempt to close it.

The Crumbles and Latimer Road Slaughter-houses are each in the course of being satisfactorily put in order.

Chapel Drove Slaughter-house has not yet been satisfactorily amended.

As much supervision of the slaughtered animals is exercised as is possible under the circumstances, but private slaughter-houses are not easily supervised.

The influence of tuberculous meat on the possible spread of Phthisis and kindred diseases has been referred to previously. As to the amount of tuberculous meat that is consumed the following figures taken from the Royal Commission Report are of interest :—

In Copenhagen, 1890-3 (inclusive), of the oxen and cows brought to the slaughter-house 17·7 per cent. were tuberculous; of the swine, 15·3 per cent.; of the calves, 0·2 per cent.; and of the sheep, 0·0003 per cent. only.

In the Berlin slaughter-houses during the year 1892-3 the percentages were:—Of the oxen and cows, 15·1 per cent.; of the swine, 1·55 per cent.; of the calves, 0·11 per cent.; and of the sheep, 0·004 per cent.

In Edinburgh in 1890, on account of an epidemic of pleuro-pneumonia, 300 milch cows had to be slaughtered, and they were examined for tuberculosis; 120, or 40 per cent. were tuberculous, varying according to cowhouse from 12 per cent. to 83 per cent.

The report of the Royal Commission shows that much of the meat from some of the tuberculous animals can be safely eaten if all the tubercular matter surrounding it and in the glands, &c., is removed with skill, precautions being at the same time taken to avoid contaminating the safe meat with tuberculous matter. Where can such skilled slaughtering be carried out and such care be taken except at properly arranged abattoirs and under the eyes of independent skilled inspectors?

COMMON LODGING-HOUSES.

The state of the arrangements for the lodgment of tramps in the Borough is not satisfactory. Early in the year a Lodging-house was closed for its absolute unfitness for human occupation, leaving no Registered Common Lodging-house in Eastbourne. There is a private house not registered, being a "charitable" institution about which complaints are received, and another noted house which is undoubtedly used as a Common Lodging-house, but no steps can be taken as there is no proper provision elsewhere.

The Committee has had the matter frequently before them, and a very suitable site was chosen for the erection of

a good Municipal Lodging-house, but the plans were upset by the successful opposition of the neighbours. Another site is being sought. A small Sub-Committee visited institutions in London with a view to the erection of a Common Lodging-house here, and a site should be obtained, and the very necessary work carried out forthwith.

It is to be hoped that the absurd rule excluding "charitable" (but often paying) Common Lodging-houses from the same necessary regulations as those under which other such houses exist, will soon be a thing of the past.

ANALYSES.

The taking of samples for analysis has been more extensively carried out during 1895. One hundred samples of food were analysed and ten were returned as adulterated. Two of these were known to be mixtures, and therefore eight samples were fraudulently adulterated.

The articles are set forth at length in one of the tables. Four prosecutions were undertaken and were successful. In three there was some doubt as to the intentional guilt, and the Committee did not prosecute. In one the adulteration was very slight.

The profits of adulteration are so large that a small fine is no punishment at all in some cases.

Eighteen samples of water were sent for analysis to the County Analyst and various London analysts. Fifty-five samples of water were partially analysed for hardness and chlorine by the Medical Officer of Health up to December 31st.

OVERCROWDING.

There was one successful prosecution for overcrowding.

DAIRIES, COWSHEDS, AND MILKSHOPS.

The 1885-6 orders relating to these are being carried out, and a table is given showing some of the work done in connection with them.

UN SOUND FOOD.

The tables show what seizures of unsound food have taken place, and the prosecutions thereon.

OFFENSIVE TRADES.

No complaints have been received of the Marine Stores or Fat Boiling Works. There are two of the former and one of the latter.

FACTORY AND WORKSHOPS.

Time has not allowed the Staff to attend sufficiently to this part of the duties of the Office. More attention will be given to them in 1896, especially in view of the new Act. The factories and workshops in which the Sanitary Authority is concerned in Eastbourne are not many or large.

The Factory and Workshops Act, 1895, came into operation January 1st, 1896, and contains the following among other provisions of interest to Sanitary Authorities:—

(1) Overcrowding of workshops, &c., is defined; 250 cubic feet minimum per person.

(2) After a month a Factory Inspector can take action as to sanitary defects if the Sanitary Authority neglects to do so, and the costs are recoverable from the Authority.

(3) Increased power over Bakehouses is given to Sanitary Authorities.

(4) Laundries are to be included under the Factory Acts.

(5) The giving out of work to houses where certain infectious diseases exist, is dealt with.

Other sections also are very useful, but an Act consolidating the various Factory Acts is badly needed.

General Sanitation.

The following leaflet was issued in 1895 and extensively circulated:—

BOROUGH OF EASTBOURNE.

SUGGESTIONS TO HOUSEHOLDERS.

Pure Water, Pure Air and Pure Food are essential for Health.

WATER.

1. Cisterns should be regularly and thoroughly cleansed at least three or four times a year and should be properly covered and protected.
2. No drinking-water cistern should be in a bedroom or other occupied room or in any place liable to cause contamination.
3. Where there is a tap from the main as well as a drinking-water cistern, the water from the main alone should be used for drinking and domestic purposes.
4. No cistern should supply both drinking-water and closet direct, and especially not from one and the same pipe.

AIR.

5. To ensure pure air absolute cleanliness is necessary of yards, areas, floors, ceilings, walls, stairs, &c.
6. In small-class houses and rooms liable to much dust and dirt, lime-washed walls are very much healthier than papered walls.
7. Vegetable and other refuse should be removed to the dustbin at once or burnt. The dustbin should be portable, water-tight, kept covered and situated out of doors and away from windows. Any accumulation of refuse should be complained of to the Sanitary Authority.
8. Chamber utensils should be emptied as early as possible in the morning ; the contents may be dangerous to the occupiers of the bedroom. The bedroom "slops" should be emptied into the downstairs out-door w.c.

9. Windows should be opened, bottom and top, as frequently and for as long a time as can be managed, a through draught being obtained if possible.

10. Daylight as well as ventilation is essential for pure air, and rooms should not be darkened by heavy curtains or blinds.

11. W.C.'s and traps not frequently used should be occasionally flushed with clean water and all must be periodically cleansed.

12. Offensive smells, especially from any part of the drainage system, should be immediately attended to and the cause removed. Defects or blocking of the drainage system should on no account be neglected.

13. If the floors or the walls near the floors of a house frequently show damp, the house is dangerous. Dampness of walls, ceilings, &c., in any part of the house is injurious.

FOOD.

14. The food, of children especially, should be absolutely fresh and pure. Milk should be well boiled before use, and must not be kept in the house over twelve hours. In addition to being fresh, fruit should be quite ripe if eaten uncooked. A leaflet on the feeding of infants can be obtained at the Sanitary Office.

By Order of the Sanitary Committee,

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

Medical Officer of Health.

During the year the Whitley Road Pond was filled in; it had become a great nuisance. The "Archery" Pond is a nuisance, and should also be quickly filled in.

Office Work during 1895.

Calls and Communications received and entered	...	2,464
Letters and Reports written	... ..	989
Dust Complaints received	... ..	43
Entries made in Inspector's Journal	... ..	511
Entries made in Register of Defects and Nuisances...		93
Notices Issued	... ..	228
Entries made in Register of Samples taken	... ..	122
Returns of Inspector's Work, Notices Issued, &c., made to Committee	... ..	22
Entries made in Notification Register	... ..	156
Entries made in Voluntary Sanitary Register	...	81
Sanitary Certificates Issued	.. ...	81
Entries made in Register of Cowsheds and Dairies	...	57
Certificates of Registration Issued for same	... ..	2
Entries made in Register of Bakehouses	... ..	94
Entries made in Register of Slaughter-houses	...	89
Entries made in Register of Seizures of Unsound Meat		17
Entries made in Register of Letters requesting Amendments	... ..	145

Notices Issued in 1895.

WEST WARD.

Section of Act.	No. Issued.	No. com- plied with.	No. Lapsed.	No. Out- standing.
<i>a</i> Sec. 91 Public Health Act	12	8	4	—
<i>b</i> Sec. 36 „ „	1	1	—	—
<i>f</i> Sec. 46 „ „	2	2	—	—
<i>e</i> Sec. 106 East. Imp. Act ...	5	1	4	—
Totals	20	12	8	—

ST. MARY'S WARD.

Section of Act.	No. Issued.	No. complied with.	No. Lapsed.	No. Outstanding.
<i>a</i> Sec. 91 Public Health Act	18	13	—	5
<i>f</i> Sec. 46 „ „	9	9	—	—
<i>e</i> Sec. 106 East. Imp. Act ..	12	9	—	3
Totals	39	31	—	8

CENTRAL WARD.

Section of Act.	No. Issued.	No. complied with.	No. Lapsed.	No. Outstanding.
<i>a</i> Sec. 91 Public Health Act	71	46	15	10
<i>b</i> Sec. 36 „ „	18	9	4	5
<i>c</i> Sec. 41 (& 19 of 1890 Act)	7	2	—	5
<i>f</i> Sec. 46 „ „	8	8	—	—
<i>d</i> Sec. 49 „ „	5	5	—	—
<i>e</i> Sec. 106 East. Imp. Act ...	28	19	5	4
<i>g</i> Sec. 34 F. & W. Act, 1878	2	2	—	—
<i>h</i> Housing Working Classes Act	1	1	—	—
Totals	140	92	24	24

EAST WARD.

Section of Act.	No. Issued.	No. complied with.	No. Lapsed.	No. Outstanding.
<i>a</i> Sec. 91 Public Health Act	12	11	—	1
<i>b</i> Sec. 36 „ „	3	2	—	1
<i>c</i> Sec. 41 (& 19 of 1890 Act)	6	2	4	—
<i>f</i> Sec. 46 „ „	5	4	—	1
<i>e</i> Sec. 106 East. Imp. Act ...	3	2	—	1
Totals	29	21	4	4
Grand Totals... ..	228	156	36	36

- a.* To abate nuisances of various sorts.
- b.* To provide proper closets, dustbins, &c.
- c.* 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 limewash, &c., bakehouses.
- h.* To make houses fit for human habitation.

In addition to these statutory notices, 145 informal letters requesting amendment of premises were issued (65 of which were complied with), which otherwise would have necessitated issuing two, and in some instances three, notices in each case.

Return of Work under Food and Drugs Act, 1895.

Foodstuffs, &c.	Samples taken.	Returned as		Proceedings, &c.
		Genuine.	Adulterat'd	
Milk	38	35	3	1 prosecution and conviction; 2 sold as mixed with water.
Butter	17	17	—	
Lard	1	1	—	
Coffee	5	2	3	
Mustard	4	4	—	1 prosecution and conviction; 2, doubt as to satisfactory cases.
Confectionery ...	2	2	—	
Flour	1	1	—	
Vinegar	5	5	—	
Olive Oil	2	1	1	No prosecution, said to have been sold as mixture.
Condensed Milk...	3	3	—	
Brandy... ..	8	8	—	
Gin	2	1	1	
Whiskey	10	8	2	1 prosecution and conviction; the other very trifling adulteration, no prosecution
Rum	1	1	—	
Lemonade	1	1	—	
Totals... ..	100	90	10	

Dairies, Cowsheds and Milkshops Orders of 1885-6.

	East Ward.	Central Ward.	West Ward.	S. Mary's Ward.	Total.
No. of Dairies on Register...	5	7	1	6	19
No. of Cowsheds ,, ...	1	—	2	3	6
No. of Milkshops ,, ...	20	4	5	1	30
Infectious disease among employés	—	1	—	—	1
Infectious disease on premises	—	—	1	—	1
Notices to abate nuisances, &c.	—	—	1	1	2
No. registered in 1895 ...	2	—	—	—	2
No. removed from register in 1895	—	—	2	—	2

Infectious Diseases.

	East Ward.	Central Ward.	West Ward.	S. Mary's Ward.	Total.
No. of cases notified	48	24	15	69	156
No. removed to Sanatorium	30	12	11	50	103
No. of houses disinfected ...	35	20	11	37	103

Legal Proceedings, 1895.

No.	Nature of Offence.	Date of Hearing.	Result.
1	Default in complying with notice to abate nuisance	Jan. 28th	Order made on Defendant to do the works and pay costs, 9/-
2	Default in complying with notice to abate nuisance	" "	Order made on Defendant to carry out the works and pay costs 23/6
3	Default in complying with notice to abate nuisance	Mar. 25th	Order made on Defendant to do the works and pay costs, 13/6
4	Default in complying with notice to abate nuisance	" "	Order made on Defendant to do the works and pay costs, 13/6
5	Default in complying with notice to abate nuisance	" 18th	Summons withdrawn, Lessee undertaking to do the works and pay costs
6	Exposing for sale Escallops in an unsound state and unfit for food	Apr. 8th	Fined 40/- including costs
7	Selling adulterated gin	July 1st	Case dismissed because warranty produced (see Case 8)
8	Giving false Warranty with gin	" "	Fined £5 including costs
9	Overcrowding	" "	Fined 20/- including costs
10	Default in complying with notice to abate nuisance	Aug. 6th	Order made on Defendant to do the works and pay costs 9/-
11	Default in complying with notice to provide efficient flush to w.c. and separate water services	" "	Fined 1/- and costs 9/-
12	Exposing for sale Herrings in an unsound state and unfit for food	Sept. 30th	Fined 15/- including costs
13	Selling adulterated Milk	Oct. 7th	Fined £3 including costs
14	Exposing for sale, Pork, Beef, and Mutton, in an unsound state and unfit for food	Nov. 18th	Fined 20/- including costs
15	Exposing for sale, Pork, Beef, and Mutton, in an unsound state and unfit for food	" "	Fined £3 including costs
16	Being the Owner of a certain private well, the water of which is polluted and is being used by man for drinking and domestic purposes	" "	Order made for the Well to be permanently closed
17	Selling adulterated Coffee	Dec. 23rd	Fined 25/- including costs

Unsound Meat, &c.

LEGAL PROCEEDINGS.

Description and Quantity of Article.	Where exposed for Sale.	Result of Legal Proceedings.
Escallops, 246	On a barrow in Seaside Road	Fined 40s., including costs
Herrings, 10	No. 140, Seaside	Fined 10s., including costs
Pork, 6 $\frac{3}{4}$ lbs.	No. 142, Latimer Road	Owner fined 20s., including costs
Beef, 6 $\frac{1}{2}$ lbs.	" "	Manager fined £3, including costs
Pieces of Beef & Mutton, 7 $\frac{1}{4}$ lbs.	" "	

Unsound Meat, &c., Destroyed,
BUT NO LEGAL PROCEEDINGS TAKEN.

Description of Article.	At whose orders destruction carried out.
Beef, 3lbs., 7lbs., 6lbs., 7lbs., 12lbs., at different times...	Inspector of Nuisances
Escallops, a small quantity...	" "
Apples, 13 barrels	" "
Haddocks (dried), 64 and 32 at different times	" "
Herrings (dried), 420	" "
Rabbits (2), Quails (5)... ..	" "
Mutton, 7lbs.	" "
Whelks, 4 quarts... ..	" "
Pork, 9lbs.	" "
Pickled Pig's Heads (6) ...	" "

Premises receiving constant inspection and
attention during the year 1895.

WEST WARD.

Number of Bakehouses	...	...	...	...	...	2
" " Cowsheds	...	...	...	...	...	2
" " Farmyards	...	...	...	...	...	4
" " Dairies and Milkshops...	...	...	...	...	...	6
" " Private Stables	...	...	...	...	...	45
" " Livery Stables	...	...	...	...	...	5
" " Piggeries...	...	...	...	...	...	2
" " Slaughter-houses	...	...	...	...	...	Nil.
" " Offensive Trades	...	...	...	...	...	Nil.

ST. MARY'S WARD.

Number of Bakehouses	...	...	...	...	...	8
" " Cowsheds	...	...	...	...	...	3
" " Farmyards	...	...	...	...	...	3
" " Dairies and Milkshops...	...	...	...	...	...	7
" " Private Stables	...	...	...	...	...	50
" " Livery Stables	...	...	...	...	...	8
" " Piggeries...	...	...	...	...	...	4
" " Slaughter-houses	...	...	...	...	...	2
" " Offensive Trades	...	...	...	...	...	Nil.

CENTRAL WARD.

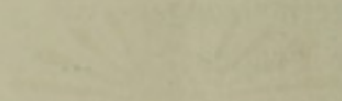
Number of Bakehouses	...	...	...	...	...	16
" " Cowsheds...	...	...	...	...	...	Nil.
" " Farmyards	...	...	...	...	...	Nil.
" " Dairies and Milkshops...	...	...	...	...	...	11
" " Private Stables	...	...	...	...	...	90
" " Livery Stables	...	...	...	...	...	12
" " Piggeries...	...	...	...	...	...	Nil.
" " Slaughter-houses	...	...	...	...	...	Nil.
" " Offensive Trades	...	...	...	...	...	Nil.

EAST WARD.

Number of Bakehouses	...	...	...	...	...	16
„ „ Cowsheds	...	...	...	...	...	1
„ „ Farmyards	...	...	...	...	...	Nil.
„ „ Dairies and Milkshops...	...	...	...	...	...	25
„ „ Private Stables	...	...	...	...	...	54
„ „ Livery Stables	...	...	...	...	...	3
„ „ Piggeries	...	...	...	...	...	5
„ „ Slaughter-houses	...	...	...	...	...	4
„ „ Offensive Trades	...	...	...	...	...	3

Summary of part of the work done by the
Inspectors of Nuisances during the year 1895.

	West and St. Mary's Wards.	Central Ward.	East Ward.
Visits to Dwelling-houses	308	290	243
„ Schools	38	4	160
„ Stable and similar premises ...	245	415	103
„ Cowsheds, Milkshops, and Dairies	126	9	125
„ Slaughter-houses and Butcher's shops	170	57	101
„ Fruiterers and Fish shops ...	129	49	120
„ Bakehouses	40	58	96
Re-inspections of premises	526	1657	810
Drains and soil pipes tested	291	365	167





—✻— *Appendix.* —✻—

* * *



TABLE I.

Table shewing the Births and Marriages and Deaths, at certain age periods, in Eastbourne for 1895, and for the 10 preceding years.

Year.	Population estimated at middle of Year.	Births registered.	Marriages.	Deaths registered.			
				At all ages.	Under 1 year.	Under 5 years.	In Public Institutions.
1895	42,000	917	238	521	122	171	80
1885	26,447	922	222	386	92	160	31
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	111
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
Average of 10 years.	33,236	861	217	448	106	160	62

TABLE II.

Table shewing the weekly Notifications of Infectious Disease during 1895.

Week.				Diphtheria.	Erysipelas.	Scarlet Fever.	Typhoid Fever.	Puerperal Fever.	Small-pox.	Totals.
No.	Date of ending.									
1	January	5	...	1	1	1	1	...	...	4
2	"	12	...	...	1	1	1	...	...	3
3	"	19	...	1	...	...	1	...	...	2
4	"	26	...	2	1	1	...	...	...	5
5	February	2	...	...	1	1	...	...	...	2
6	"	9	...	...	...	2	...	...	...	2
7	"	16	...	...	1	1	...	...	...	2
8	"	23	...	...	...	11	1	...	...	12
9	March	2	...	...	1	2	...	...	...	3
10	"	9	...	1	...	2	...	...	...	3
11	"	16	...	1	...	4	...	...	...	5
12	"	23	...	3	...	...	...	...	...	3
13	"	30	...	...	...	2	...	...	...	2
14	April	6	...	1	1	...	...	1	...	3
15	"	13	...	...	...	...	...	...	...	...
16	"	20	...	...	1	...	...	...	...	1
17	"	27	...	...	...	...	...	...	...	...
18	May	4	...	...	1	...	...	...	...	1
19	"	11	...	1	...	...	...	...	...	1
20	"	18	...	1	...	...	1	...	...	2
21	"	25	...	...	1	...	...	...	...	1
22	June	1	...	...	...	1	...	...	...	1
23	"	8	...	...	...	2	...	...	...	2
24	"	15	...	1	...	1	...	...	...	2
25	"	22	...	1	...	...	...	...	...	1
26	"	29	...	1	...	...	...	...	...	1
27	July	6	...	...	1	1	...	...	...	2
28	"	13	...	...	...	1	1	...	...	2
29	"	20	...	1	1	...	...	...	...	2
30	"	27	...	2	1	1	...	1	...	5
31	August	3	...	...	...	2	...	...	...	2
32	"	10	...	...	...	2	...	...	1	3
33	"	17	...	2	...	...	...	...	1	3
34	"	24	...	1	1	...	...	...	...	2
35	"	31	...	3	...	...	...	...	...	3
36	September	7	...	2	...	...	1	...	...	3
37	"	14	...	1	...	...	2	...	...	3
38	"	21	...	2	1	1	3	...	6	13
39	"	28	...	1	...	...	1	...	5	7
40	October	5	...	...	...	3	1	...	...	4
41	"	12	...	1	1	1	...	...	...	3
42	"	19	...	...	...	...	1	...	1	2
43	"	26	...	...	...	2	...	...	1	3
44	November	2	...	1	2	2	1	...	1	7
45	"	9	...	...	...	1	...	...	1	2
46	"	16	...	...	...	...	...	...	...	...
47	"	23	...	1	1	2	1	...	...	5
48	"	30	...	...	...	...	...	...	...	...
49	December	7	...	...	...	2	...	...	...	2
50	"	14	...	1	...	2	...	1	1	5
51	"	21	...	1	1	...	1	...	...	3
52	"	28	...	...	...	3	...	...	...	3
		28 to 31	...	1	1	1	...	...	...	3
Totals				36	21	59	18	3	18	156

The 156 includes one case of Membranous Croup.

TABLE III.

Table shewing the number of Deaths from the seven principal Zymotic Diseases in the 10 years, 1885-1894, and in the year 1895.

	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	
											Cases.	Death-rate.
Small-pox	1	...	...	...	...	...	...	...	...	...	2	·05
Measles	12	2	6	...	10	3	...	2	55	...	4	·09
Scarlet Fever	...	1	1	2	...	1	1	1	7	1	1	·02
Whooping Cough	4	21	3	17	2	3	20	3	29	1	14	·33
Diphtheria	15	12	9	13	52	80	33	5	8	6	4	·09
Enteric Fever	4	2	3	4	3	2	2	2	3	4	2	·05
Diarrhoea	17	39	35	5	20	15	8	37	39	8	36	·85
Totals	53	77	57	41	87	104	64	50	141	20	63	1·48
Zymotic Death-rate per 1,000 population	2·19	2·98	2·19	1·53	2·80	3·32	1·92	1·46	3·71	0·53	1·50	...

Table V.—Estimated Population, 42,000.

1895.						1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Year.	
BIRTHS.	Males	...	...	...	...	157	116	116	124	513
	Females	...	...	...	...	110	96	115	83	404
	Total	...	...	...	...	267	212	231	207	917
	Equivalent annual rate per 1000 persons					25.43	20.19	22.00	19.71	21.83	
NOTIFICATIONS.	Diphtheria	...	...	...	...	9	6	15	6	36
	Erysipelas...	...	...	...	...	6	4	5	6	21
	Small-pox...	...	...	...	...	—	—	13	5	18
	Scarlet Fever	...	...	...	...	28	4	8	19	59
	Enteric Fever	...	...	...	...	4	1	9	4	18
	Puerperal Fever	...	...	...	...	—	1	1	1	3
	Membranous Croup	...	...	...	...	1	—	—	—	1
	Total	...	...	...	...	48	16	51	41	156
Sickness-rate	...	...	...	...	4.57	1.52	4.85	3.90	3.71	
DEATHS.	Males	...	...	...	...	73	48	74	53	248
	Females	...	...	...	...	101	56	59	57	273
	Total	...	...	...	...	174	104	133	110	521
	Non-Residents	...	...	...	...	14	17	28	10	69
	Corrected Total	...	...	...	...	160	87	105	100	452
	Both Sexes	Under 1 year	39	15	53	15	122
		1-5 years	10	18	15	6	49
		5-15 years	2	1	3	3	9
		15-65 years	57	48	35	48	188
		Over 65 years	66	22	27	38	153
	Equivalent annual rate per 1000 persons					16.57	9.90	12.66	10.47	12.40	
	Deaths under 1 year per 1000 births					146	70	229	72	133	
Death-rate, excluding deaths of visitors					15.24	8.28	10.00	9.52	10.76		
CAUSES OF DEATH, &c.	Zymotic Diseases	Miasmatic Diseases	...	...	...	39	9	12	2	62
		Diarrhæal Diseases	...	...	...	3	—	30	3	36
		Septic Diseases	...	...	...	—	1	—	1	2
		Other Zymotic Diseases...	...	...	...	1	—	—	—	1
	Dietic Diseases	...	...	...	...	—	—	—	1	1
		Constitutional Diseases.	Malignant Diseases	7	9	12	9	37
			Phthisis...	16	17	8	10	51
			Other Tubercular Diseases	1	5	9	7	22
			Glycosuria	2	1	2	3	8
			Other Constitutional Diseases.	2	2	2	4	10
	Premature Birth...	...	...	...	...	11	1	5	3	20
	Local Diseases.	Old Age	19	4	11	6	40
		Apoplexy	6	2	2	8	18
		Convulsions	7	—	5	4	16
		Other Nervous Diseases	4	2	3	2	11
		Diseases of Circulatory System	10	6	4	14	34
		„ Respiratory	20	20	3	16	59
		„ Digestive	12	10	12	8	42
		„ Urinary	5	5	4	2	16
		„ Reproductive	2	1	1	—	4
		Other Local Diseases	—	1	—	—	1
	Accident	...	...	...	...	3	3	3	2	11
	Ill-defined causes	...	...	...	...	2	3	4	1	10
	Inquests held	...	...	...	...	5	5	5	4	19
Deaths in Institutions	...	...	...	...	26	18	22	14	80	
Other developmental diseases	...	...	...	...	1	2	1	2	6	
Not certified	...	...	...	...	1	—	—	2	3	
METEOROLOGY.	Atmospheric Pressure, inches, (corrected)	Mean	...	...	...	29.825	30.000	29.988	29.871	29.921
		Highest	...	...	...	30.455	30.621	30.367	30.511	30.621
		Lowest	...	...	...	29.010	29.381	29.369	29.059	29.010
	Temperature	Mean	...	...	...	36.0	52.5	61.1	47.0	49.1
		Highest	...	...	...	56.6	74.5	75.2	67.7	75.2
		Lowest	...	...	...	17.0	29.7	48.0	29.3	17.0
	Total rainfall (inches)	...	...	...	...	5.72	2.83	7.32	14.73	30.60
	Bright Sunshine, hours recorded	...	...	...	...	295.0	662.0	708.5	220.3	1885.8
	Wind, prevailing direction	...	...	...	...	N	E	W	W	W
	„ Mean hourly velocity (miles)	...	...	...	...	11.4	10.7	9.4	10.0	10.4

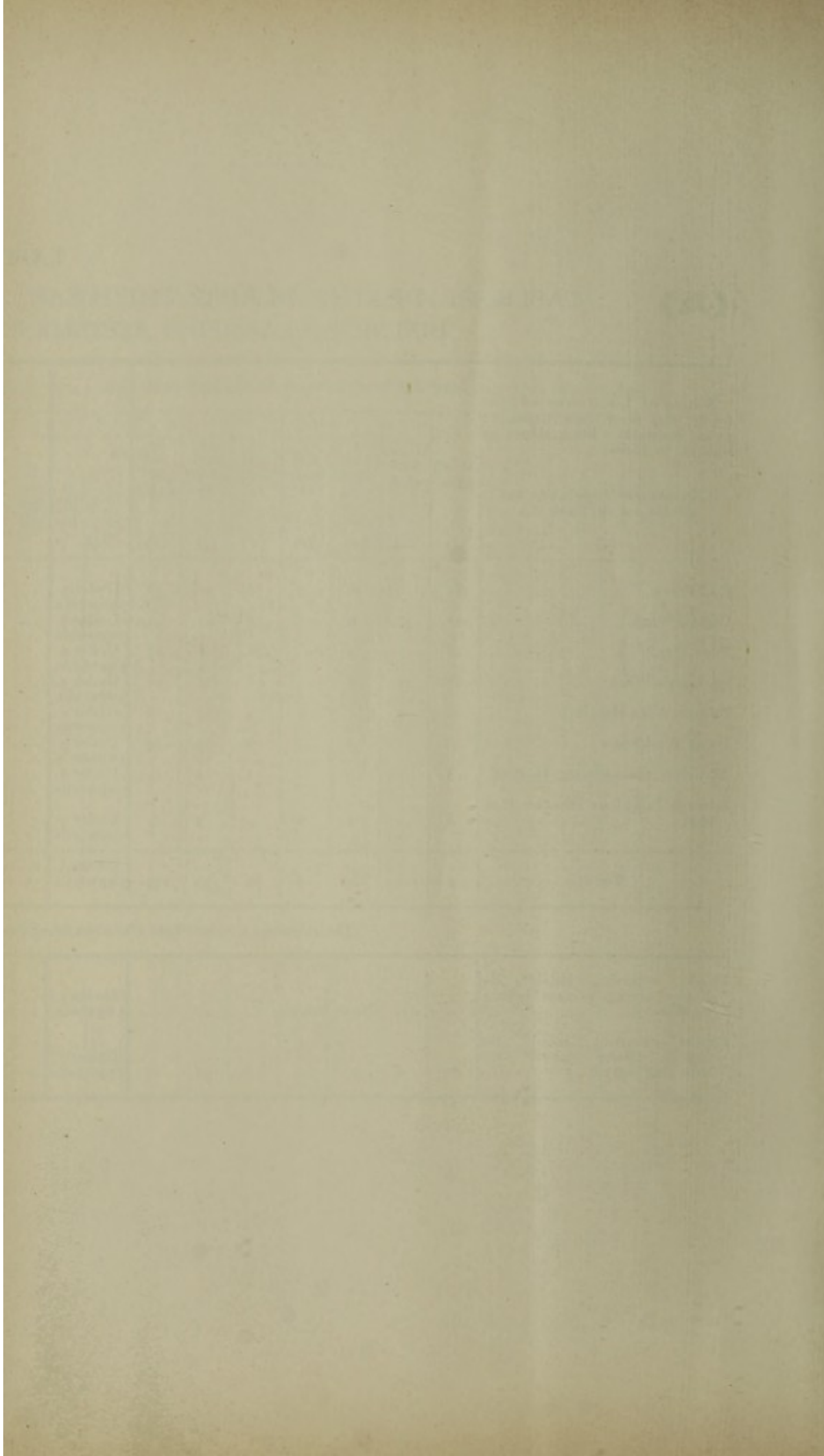
TABLE VII.

(A) TABLE OF DEATHS DURING THE YEAR 1895, IN THE EASTBOURNE URBAN SANITARY DISTRICT, CLASSIFIED ACCORDING TO DISEASES, AGES AND LOCALITIES.

NAMES OF LOCALITIES adopted for the purpose of these Statistics; public institutions being shown as separate localities. (Columns for Population and Births are in Table B.)	Mortality from all causes, at subjoined Ages.								Mortality from subjoined causes, distinguishing Deaths of Children under Five Years of Age.																						
	At all ages.	Under 1 year.	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
									Small-pox.	Scarlatina.	Diphtheria.	Membranous Croup.	Fever.					Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhoea and Dysentery.	Rheumatic Fever.	Phthisis.	Bronchitis, Pneumonia and Pleurisy.	Heart Disease.	Influenza.	Injuries.	All Other Diseases.	TOTAL.	
													Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.															
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)																							
East Ward	181	60	26	7	8	40	40	Under 5	..	..	..	1	..	..	..	..	..	..	..	3	6	17	..	5	8	1	1	..	44	86
Central Ward	131	33	9	1	6	41	41	Under 5	..	..	2	..	..	..	..	..	..	..	..	..	..	1	13	14	7	10	2	46	95	
West Ward	42	7	1	..	1	18	15	Under 5	..	..	1	..	..	..	..	..	..	..	1	..	3	..	11	10	8	8	3	46	89	
St. Mary's Ward	87	19	9	..	6	25	28	Under 5	..	..	..	..	1	..	..	..	..	..	..	1	..	1	4	1	6	4	6	1	16	34
Princess Alice Hospital	26	2	..	..	5	13	6	Under 5	..	..	..	..	..	..	..	..	..	..	..	..	4	4	6	5	9	5	..	33	59	
Union Workhouse	43	1	2	..	2	15	23	Under 5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	4	2	..	3	14	24	
All Saints' Convalescent Hospital	5	..	..	..	1	4	..	Under 5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	2	2	3	..	26	40	
Borough Infectious Diseases Hospital	6	..	2	1	..	3	..	Under 5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	3	5
TOTALS	521	122	49	9	29	159	153	Under 5	2	1	3	2	..	2	..	..	..	..	1	4	14	33	..	8	19	1	1	2	86	171
								5 upwards.	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	43	37	32	32	9	184	350

The subjoined numbers have also to be taken into account in judging of the above records of mortality.

Deaths occurring outside the district among persons belonging thereto .. .. .	..	..	None	known	..	..	..	Under 5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
								5 upwards.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Deaths occurring within the district among persons not belonging thereto	69	6	3	1	6	32	21	Under 5	..	1	..	..	..	..	..	..	..	..	..	..	4	..	..	1	..	..	..	3	9	
								5 upwards.	..	..	..	..	2	..	..	..	..	..	..	..	..	11	5	2	..	4	35	60		



(B)

(B)

NAMES OF LOCALITIES adopted for the purpose of these Statistics ; Public Institutions being shown as separate localities.	Population at all Ages.				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.												
	Census 1891.	Estimated to middle of 1895.	Registered Births.	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
					Small-pox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.	Small-pox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.				
(a.)	(b)	(c)	(d)	(e)																										
East Ward	12,113	14,776	917	Under 5	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Central Ward	10,501	11,624		5 upwards.	2	19	12	..	..	5	..	..	..	2	..	6	..	..	2	18	7	..	2	..	..	1	..	..	..
West Ward	5,736	6,362		5 upwards.	..	1	1	..	..	..	..	..	..	..	..	5	..	..	..	1	..	..	..	..	..	..	..	..	..
St. Mary's Ward	6,619	8,638		5 upwards.	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..
Princess Alice Hospital .. .. .	..	..		5 upwards.	10	25	9	..	..	4	..	..	..	1	..	7	..	10	24	4	..	2	..	..	..	..	..	..	..
Union Workhouse .. .. .	..	..	5 upwards.	..	1	..	..	..	..	..	..	..	..	2	..	..	1	..	..	..	..	..	..	..	..	..	..	..
All Saint's Convalescent Hospital .. .. .	..	..	5 upwards.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Borough Infectious Diseases Hospital .. .. .	..	..	5 upwards.	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
TOTALS	34,969	42,000	917	Under 5	6	2	4	1	..	2	..	..	3	..	21	..	6	2	2	..	1	..	..	..	1	..	..	..
				5 upwards.	12	57	32	..	..	16	..	..	..	..	..	..	12	53	19	..	7	..	..	..	..	..	..	..

THE UNIVERSITY OF CHICAGO
LIBRARY

Author		Title		Date	
A. B. C.		12345		1900	
D. E. F.		67890		1901	
G. H. I.		11111		1902	
J. K. L.		22222		1903	
M. N. O.		33333		1904	
P. Q. R.		44444		1905	
S. T. U.		55555		1906	
V. W. X.		66666		1907	
Y. Z. A.		77777		1908	
B. C. D.		88888		1909	
E. F. G.		99999		1910	